

PERCEPTIONS OF IMPORTANCE OF DIAGNOSTIC COMPETENCIES AMONG
EDUCATIONAL DIAGNOSTICIANS

Lisa Lyle Cavin, M. Ed.

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APPROVED:

Bertina H. Combes, Major Professor
Judith Adkison, Minor Professor
Lloyd Kinnison, Committee Member
Smita Mehta, Committee Member
Joyce Rademacher, Committee Member
Robin K. Henson, Chair of the Department of
Technology and Cognition
M. Jean Keller, Dean of the College of Education
Sandra L. Terrell, Dean of the Robert B. Toulouse
School of Graduate Studies

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This research was two-fold in its purpose: the first purpose being to assess the perceived relevance of the current state competency standards adopted in Texas by the State Board for Educator Certification (SBEC) as they apply to the work of the educational diagnostician and the second being to examine the diagnostician's perceived ability of training institutions to prepare professionals for the field of special education evaluation. This study examined the perceptions of educational diagnosticians ($N= 432$) through the use of a survey instrument. Specifically the survey instrument was designed to assess diagnosticians' perceptions of importance of the SBEC competencies to special education evaluation in general, and to their practice in particular; the frequency with which they use the competencies; and their degree of training to meet the demands of the competencies through their preparatory program. Results indicate variability with regard to the perceived importance of the competencies and the degree of preparation to meet the demands of the competencies in practice.

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CHAPTER 1

INTRODUCTION

Evaluation of a child's cognitive ability and academic performance is an essential component of the special education process. The Individuals with Disabilities Education Improvement Act of 2004 asserts this premise by stating, "A State educational agency, other State agency, or local educational agency shall conduct a full and individual initial evaluation... before the initial provision of special education and related services to a child with a disability" (Individuals with Disabilities Education Improvement Act, 2004). Further, federal law necessitates a reexamination of a child's condition of disability at regular intervals through the process of reevaluation. Eligibility for special education services and supports is dependent on the outcome of evaluation, while programming and placement are reliant on its depth, accuracy and interpretation. This reality affirms the critical nature of the role of the evaluator in the special education process.

Those who serve as evaluation professionals in Texas public schools emerge from a variety of disciplines. They include educational diagnosticians, licensed specialists in school psychology (LSSPs), and speech/language pathologists. Of these three groups of individuals, only educational diagnosticians are certified through the state agency for educators and are required to obtain teaching credentials and experience in the classroom before practicing as evaluation professionals. School psychologists and speech pathologists are required to obtain licensure through separate licensing boards. Speech pathologists are licensed through the Texas Department of State Health Services (<http://www.dshs.state.tx.us/speech/>), while school psychologists obtain licensure through the Texas State Board of Examiners of Psychologists (<http://tsbep.state.tx.us>). This condition places educational diagnosticians in a unique position as

educators first, then evaluators. Yet, while school psychologists and speech/language pathologists are represented by national organizations that influence state licensure boards for each profession [e.g., the National Association of School Psychologists (NASP) and the American Speech and Hearing Association (ASHA)], educational diagnosticians are not found in every state, and have limited representation at a national level. Thus, it is incumbent upon the states themselves, and the training institutions within the state to regulate the credentials of those who serve as educational diagnosticians.

The role of the educational diagnostician varies widely from one school district another, but one common thread is that of test administrator. Educational diagnosticians across Texas are responsible for the administration and interpretation of various assessments, including intelligence and achievement testing to assist in the process of determining the presence of a disability. Since such assessment requires a specialized credential, diagnosticians are one group of only a few individuals who may conduct formal evaluations. This aspect of the profession is greatly impacted by changes in assessment instruments and by alterations in federal and state criteria for the determination of a disability.

Numerous revisions in current test instrumentation, and the production of new measures of achievement and ability underscore the need for well-trained and qualified individuals to guide the evaluation process through their understanding of various disabilities, knowledge of test instruments, and familiarity with curriculum and instruction (Elliott, 2006; Roid, 2003; Woodcock, McGrew, & Mather, 1999; Kaufman & Kaufman, 2004; Wechsler, 2003; Wechsler & Naglieri, 2006). For example, the Stanford-Binet, a test of intellectual functioning that has been in existence for decades, has recently been revised to address the measure of intelligence from a multivariate perspective (Roid, 2003). The Woodcock-Johnson Tests of Cognitive

Abilities and Achievement have also been revised in recent years to broaden the scope of the instruments (Woodcock, McGrew, & Mather, 1999). The Wechsler Nonverbal Scale of Ability is a new instrument created for use with students who have limited use of the English language or oral language, in general (Wechsler & Naglieri, 2006).

Current trends in evaluation theory have indicated a need to shift the focus of special education assessment in the realm of learning disabilities from the traditional method of determination of a discrepancy between a child's level of cognitive functioning and his academic achievement to a model that emphasizes interventions at the earliest opportunity and continued tracking of a child's responses to those interventions, popularly known as RTI (Reschly, 2002; Fuchs, Fuchs & Compton, 2004; Kovalesski & Prasse, 2004; Mellard, Deshler, & Barth, 2004). Yet many states continue to use some variation of a discrepancy model in the identification of learning disabilities (Gibson, Kinnison & Stephens, 2004). In spite of the criticism surrounding the use of IQ testing in the determination of learning disabilities, there seems to be little waning in the use of such instruments among evaluation professionals (Elliott, 2000, Haney & Evans, 1999). These factors confirm the need for a high level of expertise among evaluation professionals during an era in which the role of the evaluator is multi-faceted and rapidly emerging.

Purpose of the Study

The purpose of this study is two-fold. The first purpose is to assess the perceived relevance of the current state competency standards adopted in Texas by the State Board for Educator Certification (Appendix A) as they apply to the work of educational diagnosticians. The second purpose is to examine diagnosticians' perceived ability of training institutions to

prepare professionals for the field of special education evaluation. The participation of educational diagnosticians in this research study will help further the knowledge regarding effective training of evaluation professionals, and will assist in assessing institutional effectiveness in the preparation of educational diagnosticians.

A thorough review of the literature indicates a dearth of research in the specific preparation of educational diagnosticians. Educational diagnosticians possess a unique blend of skills in that their certification calls for not only a valid teacher certificate, but also a minimum of two years teaching experience. In addition to training in evaluation techniques at an approved preparatory institution, diagnosticians must also acquire a master's degree (Texas Administrative Code, 2002). Unlike school psychologists and speech language pathologists who are also trained in evaluation, educational diagnosticians, by virtue of their classroom teaching experience, possess an understanding of instructional strategies and the implications of disabilities on classroom performance.

Statement of the Problem

While research in the area of educator preparation is abundant (Brownell, Ross, Colon, McCallum, 2005; Dean, Lauer, & Urquhart, 2005; Wineburg, 2006), evidence of research in the area of preparation of evaluation personnel is practically nonexistent. With recent revisions in the Individuals with Disabilities Education Act (2004) and the impending reauthorization of the No Child Left Behind Act (NCLB, 2001), public policy trends reflect a heightened pressure to accurately identify children with disabilities and subsequently educate them to the greatest extent possible with their typical peers, in the general curriculum, while measuring their progress against the same accountability standard (United States Department of Education, 2002a).

Therefore, it is incumbent upon state governing boards that set standards for preparation programs to examine their competency requirements and curricular content to determine if they are educating evaluators for the challenges of the profession.

Societal pressures, educational reform, and legislative action mandate that state departments of education examine their standards and competencies, and that institutions of higher learning evaluate their approaches to educator preparation, in order to produce competent, ethical, and able educational diagnosticians to participate in the process of identification of students with disabilities. This study will seek to determine educational diagnosticians' perceptions of the relevance of the Texas Educational Diagnostician Competencies and the effectiveness of their preparatory program in equipping them to meet the challenges of their employment.

Research Questions

As the official certification board for the Texas Education Agency, it is the charge of the State Board for Educator Certification (SBEC) to oversee the evaluation of educators in Texas. As such, SBEC has established competencies that match standards set forth in the Texas Administrative Code and assesses those who wish to be educational diagnosticians over those competencies through the Texas Examinations of Educator Standards (Appendix B). It is assumed that preparatory programs, including university-based programs and alternative certification programs, will provide their students with the knowledge and skills to successfully master the concepts assessed through the TExES for any subgroup of educators. Likewise, it is assumed that examinees will study and know these standards before attempting to pass the TExES. The following research questions seek to determine whether educational diagnosticians

believe these standards to be relevant and applicable; which competencies are deemed to be important; the degree to which these competencies are referenced in field application; and the degree to which preparatory programs meet the challenge of equipping the educational diagnostician for field experience.

Research Question 1: Which of the Texas State Board for Educator Certification Educational Diagnostician competencies are deemed to be important in the daily practice of educational diagnosticians in Texas?

Research Question 2: Do years of experience affect the educational diagnostician's perception of the SBEC Educational Diagnostician Competencies?

Research Question 3: How often do educational diagnosticians utilize the SBEC Educational Diagnostician Competencies?

Research Question 4: How well do educational diagnosticians perceive that they have been prepared to meet each of the SBEC Educational Diagnostician Competencies?

Research Question 5: Does method of preparation impact perceptions of importance of SBEC Educational Diagnostician Competencies among educational diagnosticians?

Limitations

The following factors must be considered as possible limitations of the study.

Survey research, as a design that determines the process of data gathering, is subject to human perception. Each respondent brings a unique set of experiences to the survey that impacts the response. Further, quantitative non-experimental design can offer no control over what may influence a participant's response (McMillan & Wergin, 2002). Since manipulation of an independent variable and random assignment to groups are not a part of this research design, the survey researcher must observe the world as it naturally occurs through the perception of the respondent (Johnson & Christensen, 2004).

Participation in the study was voluntary and those receiving an invitation to participate via email may have chosen not to participate. The nature of the survey dissemination limits the

researcher's ability to gain a truly representative sample of the demographics of educational diagnosticians from around the state. However, survey research has been used for decades as an efficient means of gathering information from a sample of a population. One of the most famous survey researchers, George Gallup, began his ubiquitous polling in 1935. Although it is not as rigorous as double-blind studies, it more effectively gleans the opinions of large numbers of people. Surveys are used as aids to planning and decision making in government agencies, political organizations, business corporations, and a wide array of not-for-profit institutions (McNamara, 1994). Due to their ease of distribution and innovations available through Web-based measures, electronic surveys will likely revolutions the utility and applicability of survey research in the future (Creswell, 2002).

Definition of Terms

Throughout this paper numerous terms are used that may or may not have the same meaning for readers. As such, the following section helps to define use of these terms for the purpose of the present study.

- Academic performance: The measure of an individual's achievement in school-related skills such as reading, mathematics and written language as measured by a standardized individual test of achievement.
- Alternatively certified educational diagnostician: An individual who holds a master's degree and has gained certification through a preparatory program offered through a school district or education service center rather than a college or university.
- Assessment: The comprehensive evaluation of an individual's overall ability using multiple data sources. This term is used interchangeably with evaluation.

- Cognitive functioning: The measure of an individual's mental ability as marked by performance on standardized test of intelligence.
- Commissioner of Education: The individual appointed by the governor of Texas to oversee the administration of the Texas Education Agency.
- Competencies: The knowledge and skills an entry-level practitioner should possess in order to successfully meet the demands of the profession.
- Educational diagnostician: An individual certified by the State Board for Educator Certification in Texas who has been trained through an accredited Master's program to administer individually administered tests of intelligence and academic performance, holds a Texas teaching certificate and has a minimum of two years of teaching experience. The role includes responsibilities in evaluation of intelligence, academic performance, behavior and socialization, and linking assessment to instruction for the purposes of programming.
- Education service center: Regional centers developed and funded by the Texas Education Agency to support school districts through training and service to educators and families.
- Evaluation: The comprehensive assessment of an individual's overall ability using multiple data sources. The term is used interchangeably with assessment.
- Evaluation professional: The term includes all those individuals with a license or certificate issued by the state for the purpose of administering and interpreting formal standardized evaluations. The term includes educational diagnosticians, licensed specialists in school psychology and speech/language pathologists.
- Licensed specialist in school psychology (LSSP): An individual licensed in Texas to practice school psychology. The role includes responsibilities in evaluation of intelligence, academic performance, behavior and socialization, psychological diagnoses and therapy.

- Special education evaluation: The assessment of an individual's overall ability for the purpose of determining eligibility for special education services as a student with a disability.
- Special education evaluator: An individual certified or licensed to conduct standardized assessments for the purpose of determining special education eligibility. The term includes educational diagnosticians, school psychologists, and speech/language pathologists.
- Speech/language pathologist (SLP): An individual licensed in Texas to evaluate speech and language disabilities and provide speech/language therapy.
- Standards: A set of professional attributes and expertise that communicate to members of the profession and the community a description of the work, values and characteristics of the field.
- State Board for Educator Certification: The organization established by the state education agency to oversee the credentialing process of educators in Texas. The agency is organized into four broad areas: educator preparation, assessment and accountability, certification and professional discipline, which includes investigation and enforcement.
- State Board of Education: A body of fifteen elected members who, in partnership with the Commissioner of Education, oversee the public education system in Texas.
- Teacher certification: The credential issued by the State Board for Educator Certification that enables an individual to seek employment as a teacher in Texas. Obtaining a teacher certificate requires passing the appropriate certification examination and successful completion of an approved preparatory program through a university or alternative program. Certification is also available to certified educators from other states who apply for Texas certification and meet the guidelines set forth by SBEC.
- Texas Administrative Code (TAC): A compilation of all state agency rules in Texas.

There are sixteen titles in the Texas Administrative Code, with each title representing a category and relating agencies assigned to the appropriate title.

- Texas Education Agency: The state education entity comprised of the commissioner of education and staff members who, in conjunction with the State Board of Education, monitor and guide programs and activities related to public education in Texas.
- Texas Education Code (TEC): The statutes passed by the Texas Legislature that apply directly to public education in Texas.
- Texas Examination of Educator Standards (TExES): The competency test administered to all educators in Texas for the purpose of receiving certification.
- Traditionally certified educational diagnostician: An individual who received certification as a diagnostician through a graduate program at a university accredited for the purpose of preparing educational diagnosticians for the field.

CHAPTER 2

REVIEW OF LITERATURE

This chapter reviews the literature relevant to the problem of this study: that is, to determine educational diagnosticians' perceptions of the relevance of the Texas Educational Diagnostician Competencies to their daily work and the effectiveness of their preparatory program in equipping them to meet the challenges of their employment. Societal pressures, educational reform, and legislative action mandate that state departments of education examine their standards and competencies. Further, institutions of higher education evaluate their approaches to educator preparation in order to produce competent, ethical, and able educational diagnosticians to participate in the process of identification of students with disabilities.

The chapter investigates issues relevant to special education evaluation by beginning with an examination of the definition of evaluation as it pertains to special education. It will continue with a review of the origins and history of special education evaluation, its significance, and current issues in the field. The following section will explore the types of personnel involved in special education evaluation, the types of programs that prepare professionals for the field of special education evaluation, and the emerging role of the evaluation professional, based on current trends and research in evaluation. Finally, the chapter will examine the development of standards and competencies for educators, as well as for educational diagnosticians.

Special Education Evaluation

Since its inception, special education has required some form of evaluation as part of the process of determining eligibility and the need for special services and supports. Kaufman (2000) credits the beginning of IQ testing to Jean Esquirol, who, in 1838, was the first to distinguish

between mental retardation and emotional disturbance. His testing centered on the use of language. Edward Seguin made a leap in the early 1900s when he examined sensory discrimination, motor control, and nonverbal thinking. Seguin was not content to label levels of retardation. He was intent on educating individuals with mental retardation (Kaufman, 2000).

Alfred Binet is usually credited with creating the first valid intelligence test in 1903 in France. Lewis Terman of Stanford University adapted the Binet test for use in the United States and developed the Stanford-Binet Intelligence Test in 1916. Derivations of the Stanford-Binet were used by the United States Army during World War I, World War II and through the 1950s. It was finally supplanted in the 1960s when the Wechsler scales began to gain ground. A practical, education-related society was ready to discontinue use of the Binet in favor of the Wechsler scales that offered three intelligence quotients (performance, verbal, and full scale). Wechsler single-handedly changed the face of intellectual assessment shifting the paradigm from psychometric exercise to clinical art (Kaufman, 2000).

During the period from 1960 to 1975, researchers continued to develop tools appropriate for the identification of students with learning disabilities and sharing those tools with other educators (Hallahan & Mock, 2003). The outgrowth of this period of experimentation in the identification process of learning disabilities over the ensuing thirty-year period has been one of increasing reliance upon an assessment model heavily focused on formal evaluation of a student's ability and achievement utilizing standardized measurement of cognition and academic performance (Bateman & Chard, 1995; Hammill, 1990; Reschly, Hosp, & Smied, 2003).

The latest revision of Individuals with Disabilities Education Act (IDEA) reflects current research questioning the efficacy of the discrepancy model. Researchers are advocating the use of divergence models such as response to intervention (Aaron, 1997; Francis et al., 2005; Fuchs,

Fuchs, & Compton, 2004; Reschly, 2002; Hosp & Reschly, 2003), a problem-solving model (Marston, Muyskens, Lau, & Canter, 2003), and a processing model (Naglieri & Rojahn, 2004). Others argue that the discrepancy model is not without some merit and should not be thrown out completely (Elliott, 2000; Mastropieri & Scruggs, 2005). A response to intervention model of identification of learning disabilities is one that requires the documentation of a child's failure to respond to scientifically-based instructional interventions through progress monitoring (Batsche, Elliott, Graden, Grimes, Kovalski, Prasse, Reschly, Schrag, & Tilly, 2006). Similarly, a problem-solving model requires a group of well-trained and skilled experts in behavior and learning who assist the staff and teachers in the design of interventions, accommodations and strategies to remediate the identified learning problem (National Joint Committee on Learning Disabilities, 1997). A processing model of learning disability diagnosis is one that employs an analysis of cognitive processes, their strengths and weaknesses, in determining the presence or absence of a disability (Naglieri & Rojahn, 2004).

A History of Evaluation

The formal measurement of intelligence in general harkens back to the turn of the twentieth century when Frenchmen Alfred Binet, Victor Henri, and Theodore Simon began the development of methods by which to study mental functioning (Sattler, 2001). Their approach focused on higher mental functions, rather than simplistic sensory processes. Binet and Simon created a useful intelligence test for screening school children in 1905 in France. In 1909, Henry Goddard translated the Binet-Simon scale into English and in 1916, Lewis Terman of Stanford University revised the instrument for use with American school children, thus creating the revision known as the Stanford-Binet Scale (Sattler). The notion of mental age divided by

chronological age to determine a ratio termed the intelligence quotient or IQ was realized by Terman, as well, and was included as part of the 1916 version of the Stanford-Binet Scale.

Federal regulations have historically encouraged the inclusion of intelligence quotients in the identification of students with disabilities in the areas of mental retardation and learning disabilities (IDEA, 1997). Likewise, many states have mandated the use of intelligence tests in the diagnosis of these disabilities (Gibson, Kinnison & Stephens, 2006). In fact, of the forty states reporting criteria of specific learning disabilities determination on their state department of education Websites, 24 report the use of a severe discrepancy model of some type. Not until the revision of IDEA in 2004 has the tide shifted to a model of identification that does not necessarily include the use of intelligence testing in the diagnosis of a specific learning disability (IDEA, 2004).

Under the previous model of learning disabilities identification, the role of the evaluation professional has been a critical one in the identification process of students with disabilities (Kratochwill & Shernoff, 2004; Mastropieri & Scruggs, 2005; Reschly, 2004). With the revision of IDEA and the broadening of the parameters surrounding learning disabilities (LD) diagnosis, the role of the evaluator is one that is currently under much scrutiny and review as to the importance and impact of that individual in the special education identification process. One concept that continues is that the interdisciplinary team or individualized education plan team has the ultimate authority as to whether or not a student has an educational disability (IDEA, 2004). Notwithstanding, the opinion of the evaluation professional is imminently influential in the team's decision.

While federal statute and regulations influence the states' definitions and operationalization of the term specific learning disability, states exercise significant discretion in

determining their own definitions (Gibson, Kinnison, & Stephens, 2006; Reschly, Hosp, & Smied, 2004). While nearly half of all states assert the use of the discrepancy model, others use methodologies that include a deviation from grade level standards. However, with No Child Left Behind regulations weighing so heavily on education systems, off-grade level testing is under constant revision. States are scurrying to keep pace with federal mandates and trying to balance the individualization ideal that permeates IDEA with the standardization of testing, a tenet of the No Child Left Behind Act (NCLB).

Whereas some noted experts in the field of learning disabilities continue to assert the merits of cognitive assessment and the IQ-achievement discrepancy model (Elliott, 2000; Mastropieri & Scruggs, 2005), others (Aaron, 1997; Francis et al., 2005; Fuchs, Fuchs, & Compton, 2004; Reschly, 2002; Hosp & Reschly, 2003) posit the potential of models that utilize the response to intervention approach to LD diagnosis. Much debate can be found currently in literature regarding the opinions of radically divergent schools of thought on the topic of the appropriate model of LD identification.

Defining Special Education Evaluation

In order to define special education evaluation, one must first examine the areas within special education and the manner in which each disability is defined. Thirteen disability categories are recognized in the Individuals with Disabilities Education Improvement Act of 2004, more commonly referred to as IDEA 2004. They are: autism, deaf-blindness, deafness or hearing impairment, developmental delay, emotional disturbance, mental retardation, multiple disabilities, orthopedic impairment, other health impairment, specific learning disability, speech or language impairment, traumatic brain injury, and visual impairment. Of these thirteen, only

two categories specifically require the consideration of intelligence as a determinant factor in eligibility. Those two categories are mental retardation and learning disabilities.

The Code of Federal Regulations states the definition of mental retardation as significant sub-average intellectual functioning with deficits in adaptive behavior. (IDEA, 2004) Further, the disability must be manifested during the developmental period. The State Board of Education in Texas (Texas Education Agency, 2004) has further defined mental retardation as intelligence measured at two or more standard deviations below the mean on tests of verbal and nonverbal intelligence. This definition quantifies the condition of mental retardation and if formal measures of intelligence are deemed appropriate for the child, the expertise of a professional trained in evaluation is required to administer tests to measure the child's cognitive ability.

Likewise, the definition of a learning disability, has until the most recent reauthorization of IDEA, required the consideration of intelligence, achievement and the discrepancy between the two as part of the determination of a learning disability (IDEA, 1997). The remaining eleven disabilities require the participation of other professionals such as a medical doctor for a diagnosis of traumatic brain injury, an ophthalmologist or optometrist for a visual impairment diagnosis, an audiologist or otologist for the determination of a hearing impairment, a psychologist or psychiatrist for emotional disturbance, or a speech pathologist for the diagnosis a speech or language disorder (Texas Education Agency, 2004). Thus, the federal definitions and subsequent state requirements mandate the involvement of various professionals in the process of disability identification. In 2002, the American Association on Mental Retardation, now known as the American Association on Intellectual and Developmental Disabilities, stipulated in its definition that those individuals considered to have mental retardation demonstrate limitations in intellectual functioning (Luckasson et al., 2002). As such, the evaluation process varies

depending upon the area of suspected disability. Likewise, the participation of particular members as part of the multi-disciplinary team is contingent upon this factor.

These definitions of mental retardation and specific learning disability have necessitated the participation of evaluation personnel trained in the administration of intelligence testing in the identification process that precedes the provision of special education services under the IDEA. The federal regulation defines evaluation as:

Procedures used in accordance with CFR 300.304 through 300.311 to determine whether a child has a disability and the nature and extent of the special education and related services that the child needs (IDEA, 2004).

Further, CFR 300.304 through 300.311 describe a detailed set of parameters to which evaluators must adhere (IDEA, 2004). Those parameters mandate that evaluation professionals assure the use of a variety of assessment tools and strategies with which to gather information about the child, not limiting the evaluation to the use of a single measure as the sole criteria for determination of a disability, and the use of technically sound instrumentation. The regulations continue by asserting that evaluators must use instruments that are not culturally or racially biased; they must use evaluation tools for the purposes for which they were designed; they must be trained and knowledgeable in the administration of the instrument; and they must assess in all areas of suspected disability. Therefore, the definition of “evaluation” as it appears in federal law and the accompanying regulations is, in fact, a set of guidelines or procedures to be used in the evaluation process.

A Brief History of Learning Disabilities

Within the field of special education evaluation, much time and attention is devoted to the particular needs of assessment of students with learning disabilities. Thus, a brief history of

learning disabilities is included. It was Samuel Kirk who first coined the term “learning disability” and used it in print in his text *Educating Exceptional Children* (Kirk, 1962). Kirk defined a learning disability as:

a retardation, disorder, or delayed development in one or more of the processes of speech, language, reading, writing, arithmetic, or other school subject resulting from a psychological handicap caused by a possible cerebral dysfunction and/or emotional or behavioral disturbances. It is not the result of mental retardation, sensory deprivation, or cultural and instructional factors (p.263).

Kirk later used the term in an address to the Conference on the Exploration into Problems of Perceptually Handicapped Children meeting in Chicago in 1963 (Hallahan & Mock, 2003). The group of parents in attendance embraced the term, as they were searching for a name for a new national organization to represent the needs of a particular group of children. They named their new organization the Association for Children with Learning Disabilities, now known as the Learning Disabilities Association of America. Hallahan and Mock report that two years later, Kirk’s former student Barbara Bateman furthered the definition by proposing that children who have learning disorders are those who demonstrate an educationally significant discrepancy between their level of performance and their estimated potential, which may or may not be accompanied by dysfunction of the nervous system, and which are not the result of generalized mental retardation, a lack of cultural or educational opportunity, emotional disturbance or sensory impairment. This definition inextricably linked the notion of ability-achievement discrepancy to the determination of learning disabilities (Hallahan & Mock).

The following years brought the funding of research by the federal government through the formation of a project entitled Minimal Brain Dysfunction: National Project on LD in Children. A portion of the charge to this project was to hone a definition to the term “learning disability.” The project consisted of three task forces with varied membership that resulted in

radically differing definitions of the term. One subgroup consisted primarily of medical professionals, while a second group was largely composed of educators. These two subgroups were unable to align their opinions and reach consensus on a single definition, so two ideas were put forward. The first definition maintained much of Kirk's earlier theoretical underpinnings of intra-individual differences, while the second adhered more closely to Bateman's assertion of a discrepancy between ability and achievement (Hallahan & Mock, 2003).

Amid the debate over the two disparate definitions of the term "learning disability," the Education of the Handicapped Act was signed into law in 1966 (Hallahan & Mock, 2003). Unfortunately, the passage of the law did not include the provision of federal assistance to individuals with learning disabilities. The ensuing years, however, did yield further exploration and research into the construct of learning disabilities.

Myklebust and Johnson also advocated for a method of identification by using a discrepancy model (Johnson & Myklebust, 1967). Helmer Myklebust worked with children with hearing impairments. Through his work, he encountered children with normal acuity but an inability to comprehend auditorily. Doris Johnson was instrumental in assisting Myklebust in translating his ideas into classroom practices. Like Bateman, Myklebust determined a comparison between a child's expected potential and actual performance to be helpful in the diagnostic process. He introduced the concept of a "learning quotient," a numerical representation of this relationship between predicted and realized potential.

The passage of the Education of All Handicapped Children Act of 1975 solidified the use of the discrepancy model in the identification of learning disabilities. Despite continued discordant views within the learning disabilities community as to the accurate definition of the term, the new statute provided the common attainment of a goal, which was the provision of

services to children with disabilities in public schools. This fact brought factions together and served to subjugate the definition issue to a position of less prominence on the advocacy agenda for a time. However, as the provision of services for students with learning disabilities became an assumed right, the definition issue and means of identification once again took precedence on the research agenda.

In little more than a decade from the time of his initial assertion of the soundness of the use of the discrepancy model, Myklebust acknowledged that many advances had been made in the field, giving way to new perceptions of the construct of learning disabilities (Myklebust, 1980, 1983). Likewise, Bateman asserted that the use of discrepancy formulas for LD identification is problematic and recommended the use of alternative measures of LD determination (Bateman & Chard, 1995).

Beginning with the first federal statute that provided opportunities to students with disabilities and continuing through each subsequent incarnation of the law, evaluation has been an essential component of eligibility determination. Within the population of students served through special education in our nation's schools, 50.0 % are categorized as having a learning disability (USDE, 2002b). Further, other high incidence disabilities, such as speech impairment (18.9 %), other health impairment (5.1 %), mental retardation (10.6 %), and emotional disturbance (8.2 %), constitute an additional 42.8 %, making up a total of 92.8 % of all students receiving special education services. The vast majority of students served through special education comprise these five categories of high incidence disability. Within these disability categories, mental retardation and learning disabilities together constitute more than 60 % of students with disabilities. These two categories have traditionally called for the use of formal intelligence and/or achievement testing in order to determine eligibility for special education

services. Although the interdisciplinary team has the final authority in determining an educational disability, educational diagnosticians and school psychologists are utilized in conducting this type of assessment and frequently assist in making determinations regarding the eligibility for special education services of students in these subgroups (USDE, 2002b).

Current Issues in Special Education Evaluation

Dissatisfaction with the current model of discrepancy when determining a learning disability has been under fire for many years (Reschly, 2004). Research in the field has discredited the approach as a viable one for determining eligibility for special education and, in its place, has arisen a new model for assessment and instruction (Batsche et al., 2006). The response to intervention model has not been limited to empirical findings, but is mentioned in federal law as one of the approved methodologies for determining the existence of a learning disability (IDEA, 2004). The model is based upon several premises: the presence of high quality instruction and supports for all students in general education; progress monitoring and provision of specialized intervention; comprehensive evaluation for children who fail to respond to intensive academic interventions (National Joint Committee on Learning Disabilities, 2005). Skepticism exists in the minds of some who assert that many questions remain unanswered as to the “how to” of the model (Mastropieri & Scruggs, 2005). Likewise, the role of the evaluator in the new model remains unclear.

Further, the testing of cognitive functioning or IQ for the purpose of making eligibility decisions has also been criticized. Fuchs and Young (2006) assert the irrelevance of intelligence testing in the determination of learning disabilities and instead, propose the use of a response to intervention model in the diagnosis of reading disability. Francis et al. (2005) assert the

insufficiency of IQ and achievement score in determining a disability. Reschly (2004) suggests that perhaps some psychologists have a vested interest in the continuation of IQ testing for personal purposes. This debate continues at the academic level and is one of great interest to evaluation personnel.

Despite the current turning tide in the field of disability diagnosis, the evaluation professional remains a critical member of the team that steers outcomes for students in special education (Elliott, 2000; IDEA, 2004). Reschly (2004), Kratochwill and Shernoff (2004), and Ysseldyke (2005) point to the need for evaluation professionals to change with the tide or be left behind. Others continue to cite the importance of assessment that goes beyond the measurement of cognitive ability purely for the attainment of an intelligence score in search of eligibility and instead, probe the specific areas of ability that have presented the child with a challenge in the learning environment (Chard et al., 2005; De Graff & Torgenson, 2005; Fuchs, Fuchs, & Courey, 2005; Knutson, Simmons, Good, & McDonagh, 2004; Misak, 2006; Shapiro, Edwards, & Zigmond, 2005; VanDerHayden & Burns, 2005). These researchers examined the efficacy of a variety of instrumentation and methodologies for assessment of reading and math difficulties with the focus of remediation.

As times change and new theories and methodologies emerge, it is imperative that evaluation personnel are prepared to meet the demands, as well (Reschly, 2004). In order for changes to be made in evaluators themselves, preparatory programs must examine the methods and content of their programs to stay abreast with current practices and expectations in the field. Further, legislators and policymakers must be apprised of shifting trends in order to mandate appropriate standards and competencies, which match the demands of the field.

Special Education Evaluation Personnel

The role of special education evaluator is one that takes differing forms and appearances, dependant upon state requirements. For example, many states utilize the school psychologist as a specialist in evaluation, while other states recognize the educational diagnostician as one who may serve as an expert in special education assessment. Currently, approximately twelve states utilize the educational diagnostician for the purposes of special education evaluation (Gipson, Kinnison, & Stephens, 2006). The Council for Exceptional Children recognizes the role of the educational diagnostician and devotes a division of the organization to those specifically involved in the diagnostic elements of special education. The Council for Educational Diagnostic Services is the division of Council for Exceptional Children dedicated to the issues pertinent to evaluation personnel. The division has established a set of standards and a code of ethics to guide professionals in the field (Bruno & Wallker, 1997).

Many states adhere to a clinical model of evaluation through the exclusive use of the school psychologist in the evaluation process. Most states utilizing school psychologists or licensed specialists in school psychology (LSSPs) require the professional to hold a master's degree or doctorate in psychology. States have their own licensing boards, which set standards for procurement of a license to practice school psychology in that state (Fagan & Wells, 2000). The National Association of School Psychologists (NASP) is the national organization that establishes standards for professional behavior and ethics and provides training in current instrumentation and practices for members (Fagan, Gorin, & Tharinger, 2000). Each state, in turn, has a state division of the national organization that provides support to professionals on a regional level.

School psychologists are qualified to administer tests of personality, which are beyond the scope of expertise of other assessment professionals in public school settings. Specialized training in the administration and interpretation of projective types of evaluation instruments equip the school psychologist with a unique set of skills among school-based evaluators. This particular expertise enables the LSSP to serve as a leader among educators in the process of conducting functional behavior assessments and compiling behavior improvement plans for students with behavioral or socialization needs (Reschly, 2004). Like the educational diagnostician, though, many school psychologists spend much of their time in the administration and interpretation of intelligence and achievement tests for the purpose of determination of the presence of learning disabilities in students (Reschly).

Other professionals who contribute to the process of evaluation include speech/language pathologists. These professionals receive detailed training and preparation through graduate programs in speech/language pathology. Training includes an internship that examines the clinical competence of the student in the areas of assessment and therapeutic instruction. Upon licensure, speech/language pathologists (SLPs) are equipped to assess for disabilities in the areas of articulation, language, fluency and voice. The training of the SLP goes beyond assessment, however, since these professionals are also responsible for the administration of therapy in individual and group settings (Dodge, 2004).

Educational diagnosticians are recognized in a number of states, some through the use of the formal title of “educational diagnostician” and others through an informal system in which individuals serve in the capacity as educational diagnosticians in other states, yet without the same title. A thorough search of the literature yielded no definitive information as to the model of evaluation utilized from one state to the next, nor which particular states utilize the expertise

of the educational diagnostician. Texas recognizes the role of the diagnostician as an integral part of the evaluation process (Texas Education Agency, 2004). Educational diagnosticians in Texas are qualified to administer and interpret the results of standardized tests of intelligence and achievement. Texas also emphasizes the fact that the Individualized Education Plan team, known as the Admission, Review or Dismissal (ARD) Committee, has the ultimate responsibility for admitting students into special education through the determination of eligibility.

Preparatory Programs

Within the realm of educational diagnostician preparation in Texas, a limited number of options are available for training and certification. The most common and the most frequently utilized are the university programs that exist at a number of institutions around the state. The State Board for Educator Certification (SBEC) maintains a list of approved educator accreditation programs in Texas. Approximately 31 entities currently support diagnostician preparation programs, with 28 being traditional university programs. Two alternative programs are supported by regional education service centers, while one public school district (Houston ISD) maintains its own diagnostician preparation program. Programs offering diagnostician certification are located in all twenty geographic regions of the state. Regions are defined by the locations of the regional education service centers (State Board for Educator Certification, 2006).

Diagnostician certification in Texas does require the attainment of a master's degree. Thus, all preparatory programs, whether university based or alternative in nature must carry the stipulation that a master's degree be a part of the program foundation (Texas Administrative Code). Some programs are based upon the completion of the master's degree as a part of the path to certification. Others are designed for the returning student who has previously obtained a

master's degree and seeks to add the additional certification of the educational diagnostician to an existing certification.

Since certification as an educational diagnostician requires teaching credentials and classroom teaching experience, the preparatory programs for diagnosticians in Texas are found primarily in colleges or schools of education on university campuses. The diagnostician training entities that are not traditional university-based programs have varied requirements.

Requirements for some include teacher certification, two or three years of teaching experience, and/or experience in special education as in addition to the requisite master's degree. The State Board for Educator Certification requires a master's degree and two years of teaching experience (State Board for Educator Certification, 2006).

Although there is a dearth of literature on preparation of educational diagnosticians, a good parallel may be university-based and alternative preparation programs for teacher certification. The literature is rife with research into the traditional method of teacher preparation through university-based programs (Darling-Hammond, 2000; Nougaret, Scruggs, & Mastropieri, 2005; Sindelar, Daunic, & Rennells, 2004). In her review of the current state of teacher education, Darling-Hammond (2000) asserted that recent evidence points to the fact that the teachers with more preparation are more effective when faced with the rigors of the classroom. Further, she attested that programs that require more extensive clinical experiences and are more tightly integrated with content and pedagogy produce more successful teachers.

In a study of three teacher preparation prototypes, (traditional university preparation, university-district partnerships, and district-based) Sindelar, Daunic and Rennells (2004) found that all three types of preparatory programs produced teachers with a base level of competence. However, traditionally prepared teachers outperformed their alternatively prepared counterparts

in areas specific to making content comprehensible to students, monitoring student learning and providing appropriate feedback.

Likewise, Nougaret, Scruggs, and Mastropieri (2005) found similar results when analyzing outcomes of teacher observation and self-rating of 20 first-year teachers licensed through traditional programs and 20 first-year teachers who were provisionally licensed with emergency certification. Areas in which traditionally prepared teachers outperformed alternatively prepared teachers were planning, preparation, organizing the classroom environment and instruction. Interestingly, teachers in both groups rated themselves similarly, suggesting that alternatively prepared teachers are unaware of their own deficits. Although an abundance of literature exists that analyzes the merits and shortcomings of alternative teacher preparation programs, little exists specific to the field of alternative diagnostic preparation programs (deBettencourt & Howard, 2004; Kinnison & Albers, 2002).

In a report commissioned by the Texas Education Agency and the Education Service Center Region IV, and prepared by the Texas Center for Educational Research, researchers investigated personnel needs in special education in the state (Caranikas-Walker, Shapley, & Cordeau, 2006). They surveyed school districts across Texas to determine allotted special education staff positions and vacancy rates. Human resource administrators and special education administrators completed the surveys. Reporting districts indicated vacancy rates of 6.2 % for educational diagnosticians and 7.8 % for bilingual educational diagnosticians, respectively. Vacancy rates for speech pathologists were reported at 8.6 %, while the vacancy rate for bilingual speech pathologists at 19.1 % was the highest of any reported in the study. Similarly, vacancy rates for specialists in school psychology were 4.7 % and 14.5 % for bilingual specialists in school psychology.

Because of these educator shortages, and despite some researchers' opinions (Sindelar, Daunic, & Rennels, 2004; Nougaret, Scruggs, and Mastropieri, 2005) that alternatively trained teachers are not as well prepared, school districts need teachers in classrooms. In Texas, several of the regional education service centers and a number of larger school districts have their own alternative certification programs for teachers. The largest school district in Texas with about 210,000 students, and almost 13,000 teachers has its own alternative certification program. The mission statement reads:

The mission of the Alternative Certification Program of the Houston Independent School District is to recruit, train, and support qualified, degreed, professionals so that critical shortage teaching vacancies in the Houston school are filled with high quality personnel. (Houston Independent School District Alternative Certification Program)

Similarly, and presumably for the same reason, Houston ISD maintains an alternative certification program for educational diagnosticians. According to its Website (<http://dept.houstonisd.org/acp/>), applicants for the program must have a master's degree and two years teaching experience.

Other, non-university based alternative preparation programs for diagnosticians have been developed to address this shortage as well. The collaborative program at Education Service Center Region XI (ESC XI) in Fort Worth is a consortium between ESC XI and Texas Woman's University in Denton whereby candidates receive training from ESC XI personnel and coursework from professors at the Texas Woman's University.

The ESC XI Website (www.esc11.net) states:

The Consortium for Preparation of Assessment Personnel (CPAP) is a two year field-based, performance-oriented program designed to fill critical personnel shortages while preparing candidates to become effective educational diagnosticians. (Consortium for Preparation of Assessment Personnel)

These programs have been developed in an attempt to ameliorate the problem of a shortage of qualified educational diagnosticians in the state of Texas. The efficacy of such programs, although relevant and needed, has not been determined.

Standards for Educational Diagnosticians

The acceptance of and adherence to a set of professional standards are critical to any discipline and particularly to those that impact the lives of others. Education in general is one of those fields and special education evaluation and diagnosis of disabilities in particular is a discipline that requires a high degree of competence and ethical behavior (Kaslow, 2004). The standards set forth by the state legislature and operationalized by the State Board for Educator Certification in the form of competencies is an attempt to ensure that individuals practicing special education evaluation possess a base level of skills and understanding of the concepts that contribute to appropriate practice.

The development of standards intended to guide the practice of diagnostic evaluation in Texas began with the formation of a committee of Texas educators and interested citizens. This panel of individuals was comprised of educators from public and charter schools, faculty members from Texas college and university educator preparation programs, education service center personnel, content experts, representatives of relevant professional organizations, and community members. The group participated throughout the process of standards development and test preparation to ensure integrity and consistency (Fielding, 2001; Fielding & Saenz, 2004).

The Texas Education Code §21.048 mandates successful performance on educator certification examinations before the issuance of a Texas educator certificate. In order to meet

this legislative mandate, test frameworks have been developed at the behest of the Texas State Board for Educator Certification, which correlate with the competencies approved by the Texas legislature. These tests are known as Texas Examinations of Educator Standards (TExES) and the Examination for the Certification of Educators in Texas (ExCET) tests. There are currently 56 TExES tests and 8 ExCET tests. In addition there are 8 Texas Examinations for Master Teachers (TEXMAT) tests. The TEXMAT tests certify teachers as “Master Teachers” in areas of reading, technology, math or science (State Board for Educator Certification, 2006).

The test frameworks for educational diagnosticians include:

Domain I: Students with disabilities

Domain II: Assessment and Evaluation

Domain III: Curriculum and Instruction

Domain IV: Foundations and Professional Roles and Responsibilities

These domains are written into the Texas Administrative Code. This code, TAC Rule § 239.83 states, in part:

The knowledge and skills identified in this section must be used by educational diagnostician preparation programs in the development of curricula and coursework and will be used by the State Board for Educator Certification as the basis for developing the assessments required to obtain the Standard Educational Diagnostician Certificate. These standards must also serve as the foundation for the professional growth plan, and continuing professional education activities required by § 239.85 of this subchapter (relating to Requirements to Renew the Standard Educational Diagnostician Certificate).

The State Board for Educator Certification then rewrites these standards into nine competencies and develops a test based on these standards. The preparation process includes the following steps: develop standards, review standards, develop test framework, conduct job analysis/content validation surveys, develop and review new test items, conduct pilot test of new

test items, review pilot test data, administer new TExES tests, and set a passing standard (TEA, n.d.).

The challenge of bridging the gap between research and practice is one that is pervasive across disciplines. Although an extensive search of the literature failed to locate any discussion of this topic as it relates particularly to the preparation of educational diagnosticians, the global nature of the issue affords the opportunity for some extrapolation. Stoltenberg (2005) addressed this issue as it pertains to the preparation of psychologists through the use of a practicum experience or internship, drawing the conclusion that exposure to authentic situations while still in a training mode has a beneficial effect on the intern.

Standards in Education

The conceptual framework upon which this study was predicated posits a linear relationship between the accepted standards of the field of special education evaluation and the work that professionals in that field are prepared to execute. Certainly, the expectation is present that would predict this relationship if experts in the field are directing the formulation of standards. Reckase (2006) proposes a theoretical model of psychometric theory of standard setting that suggests that participants in the standards development process build an internal, pre-determined standard as a result of their own training and background. This concept may be applied to standards development for educational diagnosticians in Texas.

Although educator standards have been in existence in a broad sense for many years (Edelfelt & Rath, 1998), the evolution of standards as we know them today, took place after the pivotal emergence of the Goals 2000 movement of the early 1990s (Dilworth & Imig, 1995).

National Education Goals were formulated to guide the changing field of education and the preparation of educators who would be challenged by the needs of students in the 21st century.

Standards for special educators nationwide have been developed by the Council for Exceptional Children and shared with the membership of this professional organization.

Standards were first developed in 1965 at a conference devoted to the production of a set of professional standards for special educators. At the conference, participants drafted statements of standards, which were then revised and discussed at regional conferences. Then the Council's delegate assembly reviewed and approved the final version of the Standards. The Standards included directives on a variety of topics such as teacher education programs, certification and accreditation, continuing education and ethics of behavior (Council for Exceptional Children, 2000). These standards serve as a reference for anyone interested in special education standards.

In 1989, the Council for Exceptional Children formed the first Knowledge and Skills Subcommittee (KSS) of the Professional Standards and Practice Standing Committee (PSPSC) for the purpose of identifying core knowledge and skills of beginning special educators. On an annual basis, the PSPSC reexamines the areas of knowledge and skills that need to be developed and commissions the KSS to complete the process. The KSS reviews the literature, gathers information from state and local governments and institutions of higher learning, then organizes the knowledge and skills statements into major categories. The proposed knowledge and skills statements are included survey distributed to a stratified sample of the CEC membership, at least 50% of which are actively working in a position directly related to the knowledge and skills being considered for validation. The KSS analyzes the survey results and selects knowledge and skills statements validated through the survey instrument. The group then drafts a set of recommendations for new or amended knowledge and skills statements. The PSPSC evaluates

the recommendations and makes a decision as to the relevance of the recommendations. This decision is communicated to the CEC Assistant Executive Director for Professional Standards and Practice and is included in an annual report to the CEC Executive Board (CEC, 2000).

Bruno and Walker (1994, 1997) examined national standards development for diagnosticians through the Council for Educational Diagnostic Services, a division of the professional organization, the Council for Exception Children. The process of standards development was similar to that of CEC standards for all special educators.

Educator Standards in Texas

Educator standards in Texas are first derived by a committee of experts in the field then approved by the Texas legislature through the Texas Administrative Code (TAC). Assisted by almost 2000 educators, parents, and business and community representatives from Texas, the State Board for Educator Certification (SBEC) created sets of standards for beginning educators in an entry-level position. These standards were derived from the Texas Essential Knowledge and Skills (TEKS), the statewide public school curriculum. The standards were designed to reflect current research related to the developmental stages and learning needs of students from across the spectrum of age and ability (State Board for Educator Certification, 2006).

Educator standards produced through the State Board for Educator Certification in Texas are intended for implementation in educator preparation programs across the state. The standards are used in the development of test frameworks for Texas Examinations of Educator Standards (TExES), the new certification examination program, which began in the fall of 2002. Educational Diagnostician standards are formulated in the same way then crafted into competencies, which are measured by items on the Texas Examination of Educator Standards

(TExES) through which diagnosticians are determined to be proficient and eligible for certification.

Educational Diagnostician Standards and Competencies

The Texas diagnostician standards cover an array of knowledge and skill areas. (Appendix A) The State Board for Educator Certification (SBEC) Educational Diagnostician Competencies (Appendix B) expound upon the Standards by listing descriptors that operationalize the concept communicated through the Standard. The competencies are divided into four domains, which are as follows:

Domain I: Students with Disabilities, which includes Competencies 1 and 2

Domain II: Assessment and Evaluation, which includes Competencies 3, 4, and 5

Domain III: Curriculum and Instruction, which includes Competencies 6 and 7

Domain IV: Foundations and Professional Roles and Responsibilities, which includes Competencies 8 and 9

Standard I calls upon the diagnostician to understand and apply knowledge regarding evaluation and special education. This standard is global in nature and does not align singularly with a particular competency, but rather, encompasses the totality of the role of the educational diagnostician.

Standard II addresses the diagnostician's understanding and application of ethical and professional roles, practices and responsibilities. This standard aligns with Competency 8 of the Educational Diagnostician Competencies. The importance of ethics in the work of educators such as administrators (Edmonson & Fisher, 2002; Fisher & Polnick, 2003), coaches (Jordan et al., 2004), and special educators (Washburn-Moses, 2003) is acknowledged widely in the

literature, but as noted by Edmonson and Fisher (2002), ethics training in educator preparatory programs appears to be a low priority or a nonexistent factor.

The third educational diagnostician standard relates to the need for the development of collaboration with families, educators, community members, related service personnel, and outside agencies. This standard aligns with Competency 9 of the Educational Diagnostician Competencies. Collaboration of all types is a valued component of education in today's schools. Trent, Driver, and Wood (2003) examined collaborative efforts among educators, while Valle and Aponte (2002) analyzed the outcomes of parent-educator partnerships. Black and Blake (2001) looked at the collaboration of educators and community resources in formulating relevant curriculum. Each of these efforts illustrates the perceived importance of multiple means of collaboration in the field of education.

The Educational Diagnostician Standard IV examines the diagnostician's ability to understand and apply knowledge of student assessment and evaluation, program planning and instructional decision-making. This standard aligns with Competency 3. Thoughtful program planning on the part of educators and parents is essential to the success of students with disabilities (Washburn-Moses, 2006). The diagnostician, in particular, must understand these critical components of the special education process.

Standard V relates to the educational diagnostician's knowledge of eligibility criteria, procedures for identification of a disability, and determination of an educational need. This standard correlates with Competency 1. This competency is closely associated with the perceived role of the diagnostician in the process of special education evaluation. Much of the literature found in professional journals devoted to the field of evaluation focuses on proficiency in this competency. Richards and Taylor (2005) address the need of varied skills and an in-depth

knowledge of alternate measures of data gathering for children with profound disabilities. Early identification and intervention are the also a primary focus for the profession (Ritchey & Speece, 2004). Further, the need to identify children with disabilities by means of curriculum-based measures is putting added pressure on diagnosticians to have an array of methodologies available for identification purposes (Burns, Dean, & Klar, 2004).

The sixth standard for educational diagnosticians pertains to the ability to select, administer, and interpret formal and informal assessments and evaluations. This standard aligns with Competencies 4 and 5. This skill is highly specialized and particular to the role of the educational diagnostician among educators. Like Standard V, this area of expertise is specialized and receives much attention in the literature devoted to the field of special education evaluation. The literature includes reviews of new test instrumentation with the focus on the details of the instrument and reliability and validity of the measures (Erford, 2004; Yanosky, Jackson, Anthony, Mirto, Crotts, & Bender, 2004).

The Educational Diagnostician Standard VII relates to the understanding and application of knowledge of ethnic, linguistic, cultural and socioeconomic diversity and the significance of diversity in the planning, evaluation, and instructional process. This standard correlates with Competency 2. Shingles and Lopez-Reyna (2002) examined the role of culture in behavior, values and beliefs and the impact culture has on the learning environment. Obiakor et al. (2004) addressed the need to reduce bias in the identification process of students who are culturally or linguistically diverse. Given the documented disproportionate representation of minority students in special education programs (Hosp & Reschly, 2004; Skiba, Poloni-Staudinger, Gallini, Simmons & Feggins-Azziz, 2006), these issues directly relate to the role of the educational

diagnostician in the identification and program planning elements of service to students with disabilities and cultural or linguistic difference.

Standard VIII reinforces the importance of time management, organization and scheduling in the work of the educational diagnostician. This standard aligns with Competency 9 for educational diagnosticians. Research exists that analyzes this quality in the work of administrators (Kellogg, 2005), and teachers (MacDonald & Spence, 2001), and its critical nature to the success of educators, but in a thorough search of the literature, none was found related to the work of diagnosticians.

Educational Diagnostician Standard IX addresses the need for understanding of the behavioral and social skills of students through appropriate assessment, evaluation, planning and instruction. This standard correlates with Competency 7. An essential element of any educator's ability to best serve students, this competency seems to be of particular importance in the work of the diagnostician. Yet Schmid and Evans (1998) note the shortcoming of educators as a whole to accurately and effectively evaluate the functional nature of student behavior.

Standard X relates to the diagnostician's ability to understand curriculum and instruction as it pertains to students with disabilities. This standard aligns with Competency 6. Critical to the role of the diagnostician who plays an important part in the planning of individualized programs for students with disabilities and impacts decision-making related to placement, this competency allows the diagnostician to make the link between assessment and instruction to assist teachers in programming.

Ultimately, connections must be made among standards, competencies, field-based expectations and the daily practice of the diagnostician in order to best serve students with disabilities. Diagnosticians must look back at the history of the field of special education

evaluation and examine the formulation of standards and competencies for the use in the workplace in order to better plan for the future of the profession.

This chapter reviewed relevant literature on the determination of educational diagnosticians' perceptions of the relevance of the Texas Educational Diagnostician Competencies to their daily work and the effectiveness of their preparatory program in equipping them to meet the challenges of their employment. Further it examined societal pressures, educational reform, and legislative action from state departments of education. It investigated how institutions of higher education evaluate their approaches to educator preparation in order to produce capable, effective educational diagnosticians who are prepared to participate in the process of identification of students with disabilities.

The chapter investigated issues relevant to special education evaluation through an examination of the definition of evaluation as it pertains to special education and a review of the origins and history of special education evaluation. It explored special education personnel involved in evaluation and types of programs that prepare professionals for the field of special education evaluation. Finally, the chapter examined the development of standards and competencies for educators, as well as for educational diagnosticians.

CHAPTER 3

METHODOLOGY AND PROCEDURES

This study is designed to investigate the relevance of the current educational diagnostician state standards to the work of the educational diagnostician and the perceived ability of training institutions to ready professionals for the field of special education evaluation. The study examines the perceptions of educational diagnosticians as they relate to the importance of the State Board for Educator Certification (SBEC) Educational Competencies for Educational Diagnosticians. Training of educational diagnosticians is important today to maintain and increase the supply of qualified special education evaluators in public schools, charter schools, and private practice. Educational diagnosticians who are members of the Texas Educational Diagnosticians' Association (TEDA) were asked to complete an online survey that relates to their perceptions of the SBEC competencies.

As the demand for qualified diagnosticians has increased, universities and alternative preparation programs may need to examine alternative methods of training these evaluation professionals. The information gained from this investigation may guide training programs as they determine appropriate changes for their curriculum. Information gained from this research will add to the body of knowledge about the effectiveness of diagnostician training programs.

This chapter includes a description of the participants used for this study, the research design, instrumentation, and procedure for completing the investigation. The research questions were developed based on a thorough review of the research literature on traditional and alternative preparation programs as well as a desire to learn how educational diagnostician preparation programs can be improved. An improvement in preparatory programs may benefit Texas school children who are subject to special education evaluation. Those who design and

manage diagnostician preparation programs may improve their training methods and designs by seeking answers to the following questions:

Research Question 1: Which of the Texas State Board for Educator Certification Educational Diagnostician competencies are deemed to be important in the daily practice of educational diagnosticians in Texas?

Research Question 2: Do years of experience affect the educational diagnostician's perception of the SBEC Educational Diagnostician Competencies?

Research Question 3: How often do educational diagnosticians utilize the SBEC Educational Diagnostician Competencies in their daily practice?

Research Question 4: How well do educational diagnosticians perceive that they have been prepared to meet each of the SBEC Educational Diagnostician Competencies?

Research Question 5: How important do educational diagnosticians perceive the SBEC Educational Diagnostician Competencies to be?

These questions were answered by educational diagnosticians via an online survey tool within the Schoolwires academic portal. According to the Schoolwires Website (<http://Schoolwires.com>), Schoolwires academic portal is a content management system. It is described as a browser-based hosting and Website builder content management system, which allows districts, schools, or teachers to design and deliver Websites as well as deliver email alerts and design, disseminate, and receive surveys. This system allows for the construction and management of survey tools with a wide array of purposes and parameters.

Participants

As a member of the Texas Educational Diagnosticians' Association, I had ready access to the organization's message board on which an invitation to participate in the research was posted. The Texas Educational Diagnosticians' Association (TEDA), with approximately 1500 members, is the only statewide association for educational diagnosticians in Texas. According to the TEDA Website (www.txeda.org), Texas educational diagnosticians must meet the following

requirements:

- Successfully complete an educational diagnostician preparation program that meets the requirements of §239.82 (relating to Preparation Requirements) and §239.83 (relating to Standards for the Educational Diagnostician Certificate) of the Texas Administrative Code (Title 19; Part 7; Chapter 239; Subchapter C)
- Successfully complete the assessments required
- Hold a master's degree from an accredited institution of higher education; and
- Have two school years of classroom teaching experience in a public or accredited private school

There are two basic categories of membership for TEDA. The first category, “Active, Associate or Affiliate” membership is for those professionals who are certified as educational diagnosticians, are educational diagnosticians working toward certification, professionals working in a related area, or those who are working as contract testers for school districts (not in private practice). The second category, “Retired or Student” membership is for those who are retired educational diagnosticians who have held active membership in the past and are not currently working or students who are working toward certification as an educational diagnostician.

Research Design

Gall, Borg and Gall (1996) noted the lengthy history of the use of a survey instrument as a tool in research. Believing it to be a systematic form of data collection, the ancient Egyptians utilized population counts and surveys as a means of monitoring crop production for taxation purposes. Sociologists of the 20th century have linked the use of survey instrumentation for data collection to logical, statistical procedure for analysis of information. Further, survey research accounts for a significant proportion of the research conducted in the field of education (Gall, Borg, & Gall).

Survey research provides an avenue for studying relationships, comparisons between groups, effects of treatments, and longitudinal changes. One use of survey data is to observe the manner in which the total sample has distributed itself among the response items of a single questionnaire item (Gall, Borg, & Gall, 1996). This type of normative data may provide important information in regard to identifying need for change in schools, curricula, or educational approaches.

Survey research was utilized in this study to determine diagnosticians' perceptions of the Educational Diagnostician Competencies and differences in perceptions among educational diagnosticians. Differences in undergraduate preparation, length of time in the field, and diagnostician preparatory programs were examined. Participants were asked to provide demographic information, as well as to respond to an online survey regarding their perceptions of the importance of the SBEC competencies for educational diagnosticians. Each response was immediately returned electronically upon completion of the survey instrument. The results were examined using aggregate data for each group of participants.

Instrumentation

After conducting a thorough review of the literature, the research questions were developed and possible methods of answering the questions were explored (Creswell, 2002; Gall, Borg & Gall, 1996; McNamara, 1994). As a result, I developed the Perceptions of Importance of Diagnostic Competencies among Special Education Evaluation Personnel survey. Following is a discussion of the use of the survey in an attempt to answer the research questions.

In order to measure perception of importance, a survey was developed using the nine SBEC competencies for the Educational Diagnostician certification assessment instrument, as

they are described in the Texas Examination of Educator Standards (Appendix D). The nine competencies were used to determine the level of perceived importance by educational diagnosticians. Each of the nine competencies was stated on the survey. Participants were asked to rate each competency on a nominal scale according to their level of importance. The first question stated “How important do you believe this competency is in your practice of special education evaluation?” and participants chose from the options of “not important at all,” “somewhat important,” “important,” and “very important.” Secondly they were asked how often they utilized the competency and had the options of, “never,” “rarely,” “occasionally,” and “frequently” as answer choices. The third question for each competency was, “How well do you feel you were prepared to meet this competency through your preparatory program?” The response options were, “unprepared,” “inadequately prepared,” “adequately prepared,” and “fully prepared.” The final question related to each competency was, “How important do you believe this competency is to the field of educational evaluation?” Response options were, “not important at all,” “somewhat important,” “important,” and “very important.”

To compute test reliability for this survey instrument, Cronbach’s coefficient alpha was used to determine internal consistency (Hinkle, Wiersma, & Jurs, 1994). The survey was completed by ten educational diagnosticians in November 2006 and was repeated in December 2006. The data was statistically analyzed using Cronbach’s alpha as a means of establishing reliability. A reliability coefficient of .794 was obtained when applied to the data generated by the participants in the reliability subgroup. Content validity is assumed as a result of the expertise of those who developed the SBEC competencies. The SBEC competencies, as well as the TExES examinations, are developed by experts in the field of special education evaluation from locations throughout Texas. These competencies have been reviewed and accepted by the Texas

State Board of Education, by experts in the field of special education from institutions of higher education, and by those currently working in the field of special education evaluation.

Procedures

A proposal was submitted to the University of North Texas Institutional Review Board (IRB) and received approval. The IRB approved letter was posted on the TEDA message board with a link to the survey Website. Emails were sent to diagnosticians across the state by contact persons at each regional education service center inviting individuals to access the Website and participate in the survey. The email contained a letter from me asking for their participation, specifying estimated time needed to complete the survey, verifying IRB approval, assuring anonymity, and providing contact information (Appendix C). As surveys were completed, a copy of the survey was automatically sent to me and aggregate reports were generated by the Schoolwires product. These reports presented aggregate data categorically in raw numbers, percentages, and bar graph depictions. The survey site was open and available for participation for a three-week period.

Survey data was first analyzed in the aggregate form to protect anonymity of respondents. The data was then analyzed for differences between demographic groups on the four questions from each of the nine competencies. In order to answer the first research question, “Which of the Texas State Board for Educator Certification Educational Diagnostician competencies are deemed to be important by educational diagnosticians in Texas?” the perceived level of importance question for each competency was evaluated. Utilizing reports automatically generated by the Schoolwires survey tool, percentages of participants who responded that the competency was important or very important were calculated.

To answer the second question, “Do years of experience affect the educational diagnosticians’ perception of the SBEC Educational Diagnostician Competencies?” data was sorted by level of experience. A chi-square test was conducted using SPSS version 12.0 (2003) to determine if there was any difference between the experience groups on perceived level of importance. The chi-square test is an appropriate nonparametric statistic to find difference between groups. It was chosen because nominal data, by definition, is nonparametric and must be analyzed using nonparametric statistical computations (Hinkle, Wiersma, & Jurs, 1994). The confidence level was set a priori at .05.

To answer the question regarding how often the educational diagnosticians utilize the competencies, frequency counts were derived from the Schoolwires survey tool reports on each of the responses. Percentages were derived from the frequency counts to determine the percentage of respondents who utilized the competencies per each given answer choice.

In order to answer the question, “How well do educational diagnosticians perceive that they have been prepared to meet each of the SBEC Educational Diagnostician Competencies?”, responses to the question on preparation were tallied. A chi-square test was performed to determine differences in perception of preparation of each competency. The confidence level was set a priori at .05.

To answer the research question, “How do educational diagnosticians perceive the importance of each of the SBEC Educational Diagnostician Competencies in the field of special education evaluation?”, data were gathered from the reports generated automatically by the Schoolwires survey tool. Frequency of each response was tallied, and determinations were made based on the number of respondents who indicated the competencies were important or very important.

Summary

Research on the perceptions of educational diagnosticians on the importance of SBEC competencies required for their practice and their perceptions of preparation to meet each competency were conducted through survey research. The survey was developed from an extensive literature review and based on the following research questions:

Research Question 1: Which of the Texas State Board for Educator Certification Educational Diagnostician competencies are deemed to be important in the daily practice of educational diagnosticians in Texas?

Research Question 2: Do years of experience affect the educational diagnostician's perception of the SBEC Educational Diagnostician Competencies?

Research Question 3: How often do educational diagnosticians utilize the SBEC Educational Diagnostician Competencies in their daily practice?

Research Question 4: How well do educational diagnosticians perceive that they have been prepared to meet the SBEC Educational Diagnostician Competencies?

Research Question 5: How important do educational diagnosticians perceive the individual SBEC Educational Diagnostician Competencies to be in the field of special education evaluation?

A letter explaining the study and the uniform resource locator (URL) for the online survey was distributed via a message board posting to the 1500 members of the Texas Educational Diagnosticians' Association. Emails were also sent to diagnosticians from a contact person at each regional education service center asking them to access the survey. The returned surveys were compiled and aggregated reports were examined to determine answers to each of the research questions. Statistical procedures were conducted and calculated on the compiled data. This data are described in detail in the following chapter.

CHAPTER 4

ANALYSIS OF DATA

This study was undertaken for the purposes of investigating the relevance of the current state competency standards adopted by the Texas State Board for Educator Certification as they apply to the work of the educational diagnostician, as well as the perceived ability of training institutions to prepare professionals for the field of special education evaluation. Certified educational diagnosticians from across Texas were requested complete an online survey tool consisting of 52 questions. The survey posed a series of demographic questions then addressed each of the nine diagnostician competencies with four questions related to their perceived importance and the degree of training in each.

The research questions were developed out of an investigation of the research related to educational diagnostician standards and competencies, as well as a desire to share information on how to improve preparatory programs for educational diagnosticians in the state of Texas. The research questions are as follows:

Research Question 1: Which of the Texas State Board for Educator Certification Educational Diagnostician competencies are deemed to be important in the daily practice of educational diagnosticians in Texas?

Research Question 2: Do years of experience affect the educational diagnostician's perception of the SBEC Educational Diagnostician Competencies?

Research Question 3: How often do educational diagnosticians utilize the SBEC Educational Diagnostician Competencies in their daily practice?

Research Question 4: How well do educational diagnosticians perceive that they have been prepared to meet the SBEC Educational Diagnostician Competencies?

Research Question 5: How important do educational diagnosticians perceive the individual SBEC Educational Diagnostician Competencies to be in the field of special education evaluation?

The educational diagnostician competencies as designed by the State Board for Educator Certification are the focus of the study. The competencies are:

- Competency 1: The educational diagnostician understands and applies knowledge of federal and state disability criteria and identification procedures for determining the presence of an educational need.
- Competency 2: The educational diagnostician understands and applies knowledge of ethnic, cultural, linguistic, and socioeconomic diversity and the significance of individual diversity for evaluation, planning, and instruction.
- Competency 3: The educational diagnostician understands and applies knowledge of student assessment and evaluation, program planning, and instructional decision-making.
- Competency 4: The educational diagnostician selects and administers appropriate formal and informal assessments and evaluations.
- Competency 5: The educational diagnostician applies skills for interpreting formal and informal assessments and evaluations.
- Competency 6: The educational diagnostician understands appropriate curricula and instructional strategies for students with disabilities.
- Competency 7: The educational diagnostician understands the use of appropriate assessment, evaluation, planning, and instructional strategies for developing students' behavioral and social skills.
- Competency 8: The educational diagnostician understands and applies knowledge of professional practices, roles, and responsibilities and the philosophical, legal, and ethical foundations of evaluation related to special education.

- Competency 9: The educational diagnostician develops collaborative relationships and demonstrates skills for scheduling, time management, and organization.

Group Characteristics

A total of 505 respondents began the survey instrument and 455 completed all 52 questions. A variety of filters were available through the software program utilized to build the survey tool. These filters were used in numerous combinations to produce reports that analyzed the data yielded by the survey. Four primary options were listed in the survey in answer to the question, “ Which best describes your role?” They were: educational diagnostician, licensed specialist in school psychology (LSSP), speech/language pathologist and special education administrator. An option of “other” was also available, which provided a field for entering a role not listed in the options. Other answers included special education supervisor, special education teacher, university faculty member, special education counselor, school librarian and doctoral student in clinical psychology. Twenty-five respondents listed a role other than one of the four primary options. Of the respondents, 432 reported their role as educational diagnostician, 21 listed LSSP, 9 were speech/language pathologists and 18 were special education administrators. For the purposes of the study, a filter was applied to cull out all those respondents not reporting their role as educational diagnostician.

The age of the respondents is illustrated in Figure 1. Of the 432 diagnosticians responding to the survey, 262 individuals were 45 years of age or older, while 95 were 56 years of age or older. Although more than half of the respondents were 45 years of age or older, years of experience in the field of evaluation were heavily weighted on the opposite end of the spectrum, with 274 respondents reporting ten or less years of experience in the profession of

educational diagnosis (see Figure 2). This fact indicates that most educational diagnosticians assume that role later in their careers. This is confirmed by data illustrated in Figure 3, which reports the respondents' years of experience in education in general. In response to the question on years of experience in education, 289 survey participants reported at least 16 years of experience in education, while 135 reported more than 25 years of experience in education.

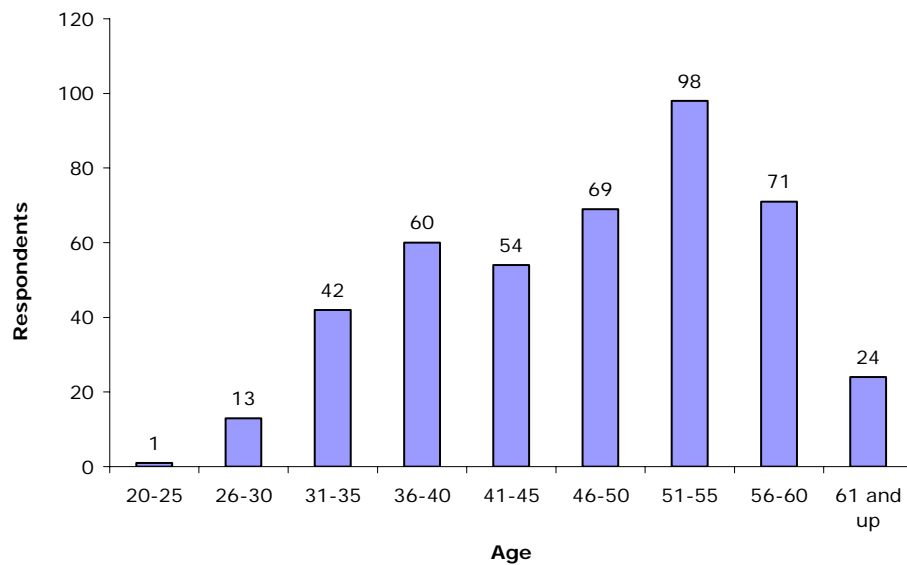


Figure 1. Respondents by age group.

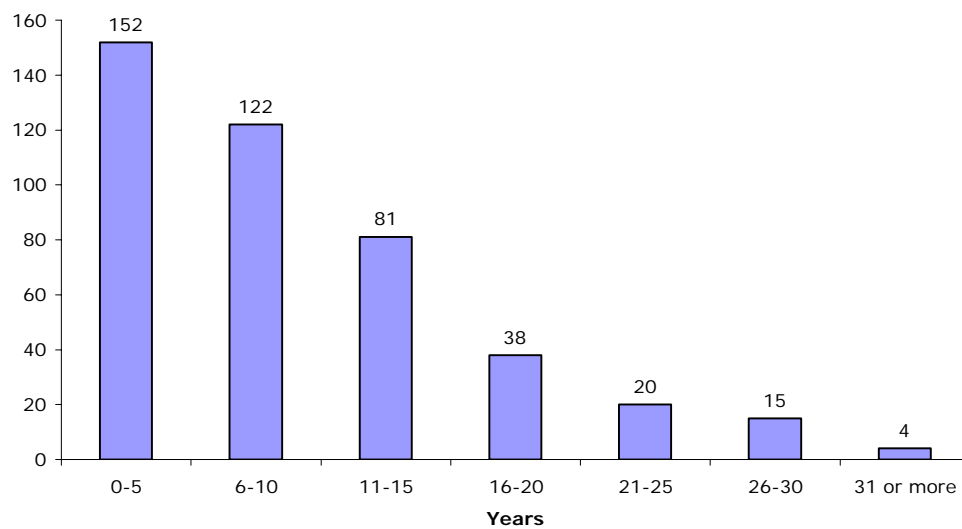


Figure 2. Respondents by years of experience as diagnosticians.

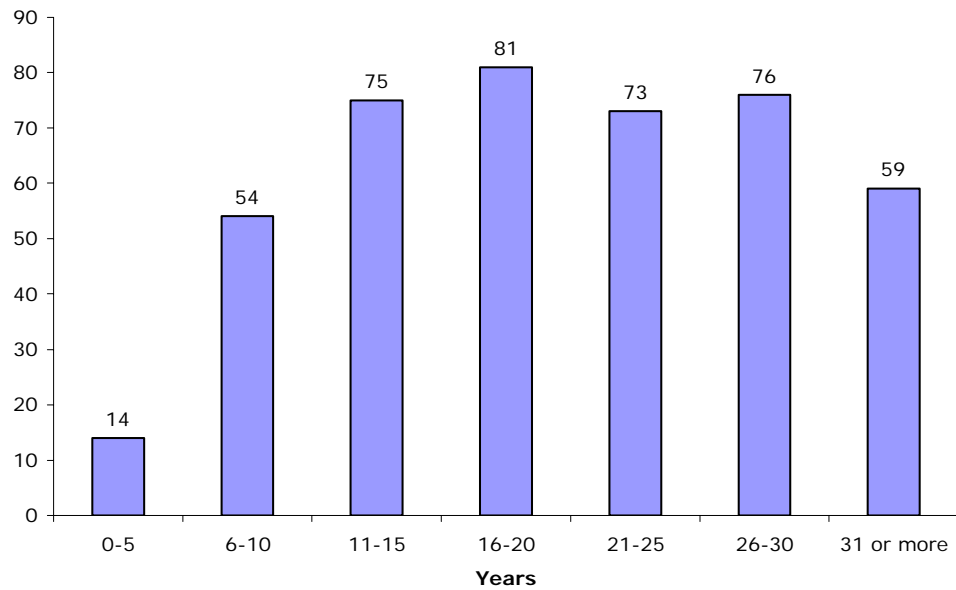


Figure 3. Respondents by years of experience in education.

Of the individuals responding to the survey, 144 reported having received an undergraduate degree in special education, while 288 reported having received an undergraduate degree in a field other than special education (see Figure 4). Further, 305 survey respondents reported receiving a master's degree in special education, while 127 held a master's degree in a field other than special education (see Figure 5).

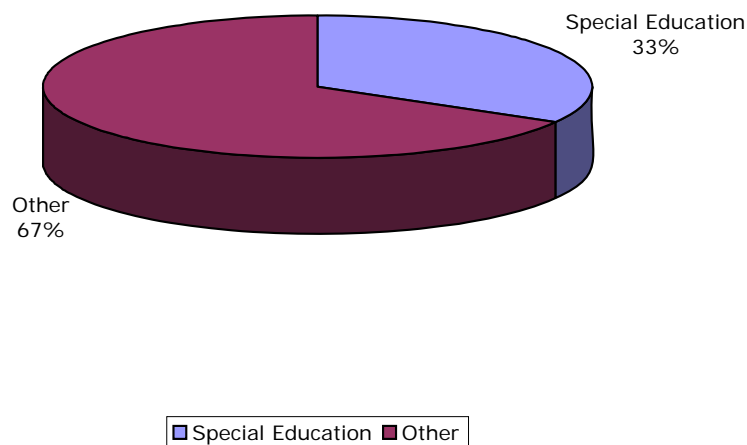


Figure 4. Percentage of respondents receiving undergraduate degree in special education or other fields.

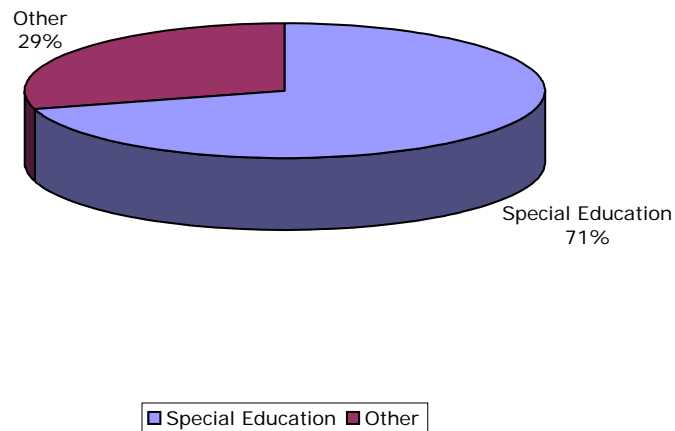


Figure 5. Percentage of respondents holding a master's degree in special education or in other fields.

Of those responding to the survey instrument, 378 individuals, or 88%, received their diagnostician training through a traditional university program, while 53 individuals, or 12%, received their training through an alternative preparatory program. (see Figure 6)

In regard to grade levels served, 150 respondents, or 35%, reported that they primarily serve students in elementary schools. Those serving secondary schools numbered 104 respondents, or 24%. Individuals who serve all levels of students in their roles as diagnosticians numbered 178, or 41%. (see Figure 7)

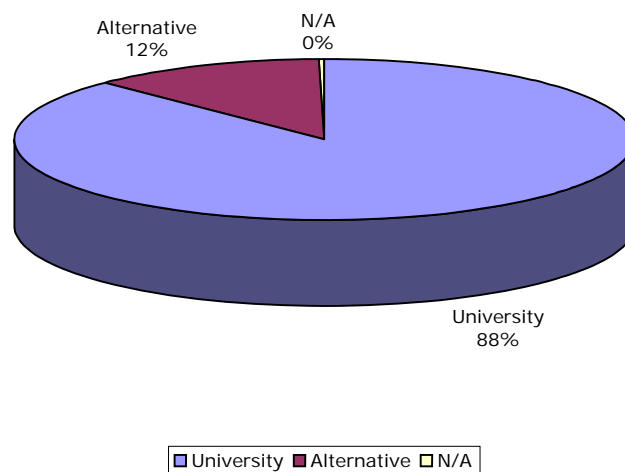


Figure 6. Percentage of respondents by training program.

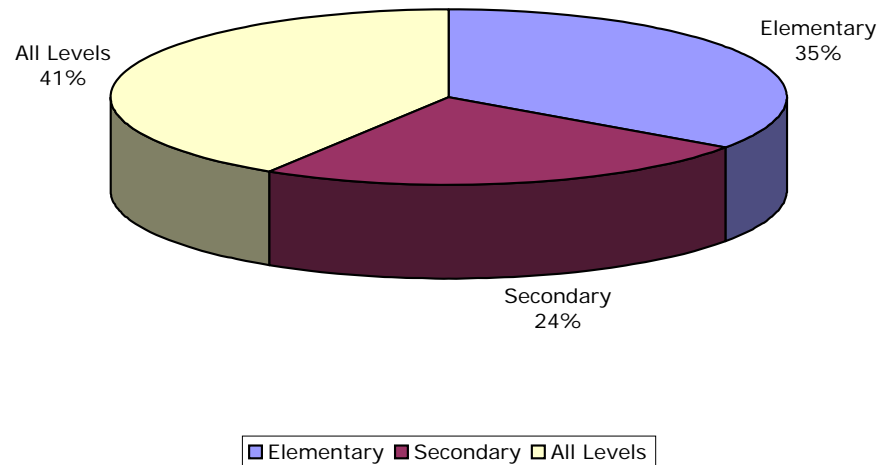


Figure 7. Grade levels served by respondents.

Chi Square Distribution

The chi-square distribution is frequently used in the analysis of nominal data such as the data obtained from opinion survey research. Chi-square analysis is an appropriate nonparametric test developed for data that does not meet the assumptions necessary to perform parametric tests (Hinkle, Wiersma, & Jurs, 1994). In chi-square analysis, observed frequencies are compared to theoretical or expected frequencies. In analyzing the four questions that were asked regarding each of the diagnostician competencies, expected frequencies were derived by averaging responses across each of the competencies. For example, it was assumed that each of the competencies was believed to be equally important to each of the other competencies. The .05 level of significance was chosen a priori.

According to the table, upper percentage points of the X^2 distribution (Fisher & Yates, 1974 reproduced in Hinkle, Wiersma, & Jurs, 1994), the appropriate chi-square statistic for three degrees of freedom at the .05 level of significance is 7.815. The chi-square statistic for three degrees of freedom was appropriate because, when given four answer choices, and once the

expected frequency of three of the categories is known, the expected frequency of the fourth category is uniquely determined.

Following these assumptions, mathematical analyses necessary to derive the chi-square statistic for each of the competencies and competency questions were performed using SPSS, a statistical software program for the analysis of research data in the social sciences (SPSS, 2003). Chi-square analysis utilizes the formula $(O - E)^2 / E$ wherein O is the observed outcome and E is the expected or theoretical outcome. Thus, expected outcome was subtracted from observed outcome. The difference was squared. The resulting number was divided by the expected outcome yielding the chi-square for each response.

Analysis of Survey Question 1

For the first question, “How important is this competency in your daily practice?,” though there was a great amount of variation. Three of the competencies yielded a significant chi-square statistic. Competency 5 (chi-square = 11.87) was seen as significantly more important than the other competencies (See Table 1). Competency 5 addresses the diagnostician’s acquisition and application of skills of interpretation of formal and informal assessments and evaluations. Conversely, Competency 2 (chi-square = 31.25) and Competency 7 (chi-square = 44.21) were seen as significantly less important than the other competencies (See Table 2). Competency 2 pertains to the diagnostician’s understanding and application of knowledge of ethnic, cultural, linguistic and socioeconomic diversity and the significance of that diversity to the processes of evaluation, planning, and instruction. Competency 7 is related to the diagnostician’s understanding and use of appropriate assessment, evaluation, planning, and instructional strategies for the development of students’ behavioral and social skills.

Table 1

Question 1 - Response of “Very Important”

Competency	Outcome	Expected	O-E	O-E sq	O-E sq / E
1	392	341.53	50.47	2547.34	7.46
2	281	333.57	-52.57	2763.38	8.28
3	385	334.36	50.64	2564.01	7.67
4	385	335.96	49.04	2405.30	7.16
5	393	330.38	62.62	3920.84	11.87*
6	253	328.00	-75.00	5624.26	17.15
7	224	326.40	-102.40	10486.35	32.13
8	316	323.22	-7.22	52.11	0.16
9	342	314.46	27.54	758.38	2.41

Note. Competency is the SBEC Educational Diagnostician Competency. Outcome is the number of respondents who answered according to the table title. Expected is the number of participants mathematically expected to answer according to the table title. O-E is the difference between outcome and expected. O-E sq is the square of the O-E column. O-E sq/E is the chi-square statistic for that row. * $p < .05$

Table 2

Question 1: Response of “Not Important” or “Somewhat Important”

Competency	Outcome	Expected	O-E	O-E sq	O-E sq / E
1	1	10.96	-9.96	99.27	9.05
2	29	10.71	18.29	334.61	31.25*
3	3	10.73	-7.73	59.80	5.57
4	2	10.78	-8.78	77.17	7.16
5	0	10.61	-10.61	112.48	10.61
6	18	10.53	7.47	55.82	5.30
7	32	10.48	21.52	463.21	44.21*
8	7	10.38	-3.38	11.39	1.10
9	3	10.09	-7.09	50.33	4.99

Note. Competency is the SBEC Educational Diagnostician Competency. Outcome is the number of respondents who answered according to the table title. Expected is the number of participants mathematically expected to answer according to the table title. O-E is the difference between outcome and expected. O-E sq is the square of the O-E column. O-E sq/E is the chi-square statistic for that row. * $p < .05$

Analysis of Survey Question 2

Question 2 asked respondents to report how often each competency was used in the diagnostician's daily practice. Competencies 1 (chi-square = 10.51), 3 (chi-square = 9.84), and 9 (chi-square = 10.67) were reported by respondents to be used significantly more in the daily practice of the diagnostician than the other competencies (See Table 3). Competency 1 deals with the diagnostician's understanding and knowledge of disability criteria and identification procedures for determining the presence of an educational need. Competency 3 explores the diagnosticians' understanding and application of knowledge of student assessment and evaluation, program planning and decision-making. Competency 9 pertains to the development of collaborative relationships, and skills in scheduling, time management, and organization. Again, as reflected in Question 1, Competencies 2 (chi-square = 9.28) and 7 (chi-square = 64.75) were viewed as being used significantly less than the other competencies (See Table 4).

Table 3

Question 2 - Response of "Very Important"

Competency	Outcome	Expected	O-E	O-E sq	O-E sq / E
1	414	353.08	60.92	3711.40	10.51*
2	291	344.85	-53.85	2899.65	8.41
3	404	345.67	58.33	3402.22	9.84*
4	386	347.32	38.68	1496.33	4.31
5	390	341.56	48.44	2346.79	6.87
6	245	339.09	-94.09	8852.41	26.11
7	205	337.44	-132.44	17540.67	51.98
8	351	334.15	16.85	283.95	0.85
9	384	325.10	58.90	3469.71	10.67*

Note. Competency is the SBEC Educational Diagnostician Competency. Outcome is the number of respondents who answered according to the table title. Expected is the number of participants mathematically expected to answer according to the table title. O-E is the difference between outcome and expected. O-E sq is the square of the O-E column. O-E sq/E is the chi-square statistic for that row. * $p < .05$

Table 4

Question 2: Response of “Not Important” or “Somewhat Important”

Competency	Outcome	Expected	O-E	O-E sq	O-E sq / E
1	3	9.80	-6.80	46.29	4.72
2	19	9.57	9.43	88.83	9.28*
3	2	9.60	-7.60	57.73	6.01
4	4	9.64	-5.64	31.85	3.30
5	1	9.48	-8.48	71.97	7.59
6	16	9.41	6.59	43.36	4.61
7	34	9.37	24.63	606.67	64.75*
8	4	9.28	-5.28	27.86	3.00
9	2	9.03	-7.03	49.37	5.47

Note. Competency is the SBEC Educational Diagnostician Competency. Outcome is the number of respondents who answered according to the table title. Expected is the number of participants mathematically expected to answer according to the table title. O-E is the difference between outcome and expected. O-E sq is the square of the O-E column. O-E sq/E is the chi-square statistic for that row. * $p < .05$

Analysis of Survey Question 3

Question 3 asked diagnosticians about the extent of training they had received from their training institutions on each of the competencies (See Table 5). The respondents rated competency 4 as having a significantly greater amount of preparation (to a “great extent”) than the others (chi-square = 96.17). Competency 4 relates to the diagnostician’s ability to select and administer appropriate formal and informal assessments and evaluations. Similarly, Competency 1 (chi-square = 21.46) was reported to be one for which diagnosticians received a great amount of preparation in their training institutions. Further, Competency 3 showed significance (chi-square = 21.96) when compared with the other competencies, also reflecting a great extent of preparation in training institutions. Likewise, survey respondents identified Competency 5 (chi-square = 15.44) as one for which they had received content and training to a great extent.

Table 5

Question 3 Response of “To a Great Extent”

Competency	Outcome	Expected	O-E	O-E sq	O-E sq / E
1	201	145.18	55.82	3116.19	21.46*
2	95	141.79	-46.79	2189.59	15.44
3	198	142.13	55.87	3121.29	21.96*
4	260	142.81	117.19	13733.90	96.17*
5	187	140.44	46.56	2167.89	15.44*
6	63	139.42	-76.42	5840.66	41.89
7	74	138.75	-64.75	4192.23	30.21
8	142	137.39	4.61	21.22	0.15
9	51	133.67	-82.67	6834.54	51.13

Note. Competency is the SBEC Educational Diagnostician Competency. Outcome is the number of respondents who answered according to the table title. Expected is the number of participants mathematically expected to answer according to the table title. O-E is the difference between outcome and expected. O-E sq is the square of the O-E column. O-E sq/E is the chi-square statistic for that row. * $p < .05$

Also within the context of Question 3, Competencies 6, 7 and 9 reflected significant differences from the expected responses (See Table 6). Respondents rated these competencies as having little to no preparation through their training programs with chi-square statistics of 18.43, 36.61 and 194.54, respectively. Competency 6 measures a diagnostician’s understanding of appropriate curricula and instructional strategies for students with disabilities. Again, Competency 7 relates to the behavioral and social skills of students and Competency 9 pertains to the development of collaborative relationships, and skills in scheduling, time management, and organization.

Table 6

Question 3 Response of “Little Preparation” or “No Preparation”

Competency	Outcome	Expected	O-E	O-E sq	O-E sq / E
1	54	117.98	-63.98	4093.24	34.69
2	142	115.23	26.77	716.72	6.22
3	57	115.50	-58.50	3422.64	29.63
4	20	116.05	-96.05	9226.25	79.50
5	55	114.13	-59.13	3496.16	30.63
6	159	113.30	45.70	2088.19	18.43*
7	177	112.75	64.25	4127.64	36.61*
8	95	111.65	-16.65	277.33	2.48
9	254	108.63	145.37	21132.97	194.54*

Note. Competency is the SBEC Educational Diagnostician Competency. Outcome is the number of respondents who answered according to the table title. Expected is the number of participants mathematically expected to answer according to the table title. O-E is the difference between outcome and expected. O-E sq is the square of the O-E column. O-E sq/E is the chi-square statistic for that row. * $p < .05$

The most significant lack of preparation came on Competency 9. Ninety-six of the 395 respondents who answered that survey question responded that they had received no training, yielding a chi-square statistic of 245.20, well above the 7.815 required to show significance (See Table 7).

Table 7

Question 3 Response of “No Preparation”

Competency	Outcome	Expected	O-E	O-E sq	O-E sq / E
1	10	24.12	-14.12	199.35	8.27
2	25	23.56	1.44	2.08	0.09
3	3	23.61	-20.61	424.90	17.99
4	2	23.73	-21.73	472.00	19.89
5	3	23.33	-20.33	413.39	17.72
6	29	23.16	5.84	34.07	1.47
7	27	23.05	3.95	15.59	0.68
8	10	22.83	-12.83	164.51	7.21
9	96	22.21	73.79	5445.31	245.20*

Note. Explanation of columns, equations, and significance same as for Table 6.

Analysis of Survey Question 4

The question of importance of each competency to the field of educational evaluation was posed by question 4 of the survey instrument. Competencies 2 (chi-square = 33.52), 6 (chi-square = 23.56), and 7 (chi-square = 35.24) were rated as having little or no importance to the field by a significant portion of the respondents (See Table 8). Conversely, Competencies 4 and 5 were reported as being significantly more important to the field than the other competencies (See Table 9).

Table 8

Question 4 Response of “Somewhat Important” or “Not Important”

Competency	Outcome	Expected	O-E	O-E sq	O-E sq / E
1	6	15.11	-9.11	83.00	5.49
2	37	14.76	22.24	494.71	33.52*
3	4	14.79	-10.79	116.49	7.87
4	0	14.86	-14.86	220.93	14.86
5	1	14.62	-13.62	185.43	12.69
6	33	14.51	18.49	341.83	23.56*
7	37	14.44	22.56	508.91	35.24*
8	7	14.30	-7.30	53.29	3.73
9	6	13.91	-7.91	62.61	4.50

Note. Competency is the SBEC Educational Diagnostician Competency. Outcome is the number of respondents who answered according to the table title. Expected is the number of participants mathematically expected to answer according to the table title. O-E is the difference between outcome and expected. O-E sq is the square of the O-E column. O-E sq/E is the chi-square statistic for that row. * $p < .05$

Table 9

Question 4 Response of “Very Important”

Competency	Outcome	Expected	O-E	O-E sq	O-E sq / E
1	355	325.83	29.17	850.69	2.61
2	254	318.24	-64.24	4126.55	12.97
3	361	319.00	42.00	1764.19	5.53
4	379	320.52	58.48	3420.28	10.67*
5	385	315.20	69.80	4872.01	15.46*
6	245	312.92	-67.92	4613.35	14.74
7	206	311.40	-105.40	11109.71	35.68
8	306	308.36	-2.36	5.59	0.02
9	342	300.01	41.99	1763.18	5.88

Note. Competency is the SBEC Educational Diagnostician Competency. Outcome is the number of respondents who answered according to the table title. Expected is the number of participants mathematically expected to answer according to the table title. O-E is the difference between outcome and expected. O-E sq is the square of the O-E column. O-E sq/E is the chi-square statistic for that row. * $p < .05$

Analysis by Years of Experience

To examine differences in perceptions of importance of the competencies between groups of diagnosticians differing by years of experience, chi-square analysis was computed for diagnosticians reporting 0-5 years experience, 6-10 years experience, 11-15 years experience, 16-20 years experience, 21-25 years experience, and 26 years or more of experience.

For diagnosticians with 0-5 years experience, chi-square analysis of Question 1 revealed no differences for competencies rated “very important.” However, by examining the competencies reported “not important” or “somewhat important,” diagnosticians with 0-5 years experience rated Competency 2 (chi-square = 39.47) and Competency 7 (chi-square = 14.56) as less important (See Table 10). Competency 2 pertains to the diagnostician’s understanding and application of knowledge of ethnic, cultural, linguistic and socioeconomic diversity and the

significance of that diversity to the processes of evaluation, planning, and instruction.

Competency 7 is related to the diagnostician's understanding and use of appropriate assessment, evaluation, planning, and instructional strategies for the development of students' behavioral and social skills.

Table 10

Diagnosticians with 0-5 Years Experience Question 1 Response of "Somewhat Important" or "Not Important"

Competency	Outcome	Expected	O-E	O-E sq	O-E sq / E
1	0	3.81	-3.81	14.50	3.81
2	16	3.78	12.22	149.27	39.47*
3	2	3.83	-1.83	3.36	0.88
4	2	10.78	-8.78	77.17	7.16
5	0	3.76	-3.76	14.11	3.76
6	8	3.73	4.27	18.22	4.88
7	11	3.68	7.32	53.58	14.56*
8	7	10.38	-3.38	11.39	1.10
9	3	10.09	-7.09	50.33	4.99

Note. Competency is the SBEC Educational Diagnostician Competency. Outcome is the number of respondents who answered according to the table title. Expected is the number of participants mathematically expected to answer according to the table title. O-E is the difference between outcome and expected. O-E sq is the square of the O-E column. O-E sq/E is the chi-square statistic for that row. * $p < .05$

On Question 2, diagnosticians with 0-5 years experience rated Competency 9 as being used more frequently as compared to others (See Table 11). The chi-square of 10.67 exceeds the 7.81 required for significance.

Table 11

Diagnosticians with 0-5 Years Experience Question 2 Response of “Frequently”

Competency	Outcome	Expected	O-E	O-E sq	O-E sq / E
1	142	122.63	19.37	375.16	3.06
2	99	121.81	-22.81	520.21	4.27
3	140	123.45	16.55	273.77	2.22
4	128	123.45	4.55	20.67	0.17
5	133	120.99	12.01	144.36	1.19
6	74	120.16	-46.16	2130.93	17.73
7	61	118.52	-57.52	3308.08	27.91
8	351	334.15	16.85	283.95	0.85
9	384	325.10	58.90	3469.71	10.67*

Note. Competency is the SBEC Educational Diagnostician Competency. Outcome is the number of respondents who answered according to the table title. Expected is the number of participants mathematically expected to answer according to the table title. O-E is the difference between outcome and expected. O-E sq is the square of the O-E column. O-E sq/E is the chi-square statistic for that row. * $p < .05$

Question 3 asked about the amount of preparation the diagnosticians had on each competency within the preparation program they attended. Those with 0-5 years of experience reported that they had a “great extent” of training significantly more on Competencies 1, 3 and 6 with chi-squares of 25.10, 12.55, and 18.01 respectively (See Table 12). They also reported a lack of training on Competency 9 with a large proportion reporting “No training” or “Little training” and a chi-square of 194.54.

Table 12

Diagnosticians with 0-5 Years Experience Question 3 Response of “To a Great Extent”

Competency	Outcome	Expected	O-E	O-E sq	O-E sq / E
1	86	50.42	35.58	1265.73	25.10*
2	45	50.08	-5.08	25.85	0.52
3	76	50.76	25.24	636.99	12.55*
4	81	50.76	30.24	914.38	18.01*
5	58	49.75	8.25	68.13	1.37
6	23	49.41	-26.41	697.36	14.11
7	34	48.73	-14.73	217.00	4.45
8	142	137.39	4.61	21.22	0.15
9	51	133.67	-82.67	6834.54	51.13

Note. Competency is the SBEC Educational Diagnostician Competency. Outcome is the number of respondents who answered according to the table title. Expected is the number of participants mathematically expected to answer according to the table title. O-E is the difference between outcome and expected. O-E sq is the square of the O-E column. O-E sq/E is the chi-square statistic for that row. * $p < .05$

When asked in Question 4 about the importance to the field of each of the competencies, diagnosticians with 0-5 years experience did not rate any of the competencies as more important than the group at large, but they did report three of the categories as being significantly less important than the others. Competencies 2, 6, and 7 were reported as being less important with chi-squares of 31.37, 15.26, and 19.43 respectively (See Table 13). Competency 2 pertains to the diagnostician’s understanding and application of knowledge of ethnic, cultural, linguistic and socioeconomic diversity and the significance of that diversity to the processes of evaluation, planning, and instruction. Competency 6 states that the diagnostician understands appropriate curricula and instructional strategies for students with disabilities. Competency 7 is related to the diagnostician’s understanding and use of appropriate assessment, evaluation, planning, and instructional strategies for the development of students’ behavioral and social skills.

Table 13

Diagnosticians with 0-5 Years Experience Question 4 Response of “Not Important” or “Somewhat Important.”

Competency	Outcome	Expected	O-E	O-E sq	O-E sq / E
1	3	5.25	-2.25	5.05	0.96
2	18	5.21	12.79	163.51	31.37*
3	3	5.28	-2.28	5.21	0.99
4	0	5.28	-5.28	27.91	5.28
5	0	5.18	-5.18	26.81	5.18
6	14	5.14	8.86	78.46	15.26*
7	15	5.07	9.93	98.57	19.43*
8	7	14.30	-7.30	53.29	3.73
9	6	13.91	-7.91	62.61	4.50

Note. Competency is the SBEC Educational Diagnostician Competency. Outcome is the number of respondents who answered according to the table title. Expected is the number of participants mathematically expected to answer according to the table title. O-E is the difference between outcome and expected. O-E sq is the square of the O-E column. O-E sq/E is the chi-square statistic for that row. * $p < .05$

Diagnosticians with 6 to 10 years of experience, had no differences from the group on Question 1. On Question 2, they did rate Competency 7 (the competency related to student behavior and social skills) as being used less frequently in their daily practice (chi-square = 10.08).

The relative amount of training as reported in response to Question 3 did show significance for diagnosticians with 6 to 10 years experience. They reported training “to a great extent” on Competency 4 (chi-square = 20.61). Competency 4 deals with the evaluator selecting and administering appropriate formal and informal assessments and evaluations.

They also reported less training on Competencies 6 (chi-square = 9.82), 7 (chi-square = 17.45), and 9 (chi-square = 66.62) (See Table 14). Competency 6 pertains to curricular and instructional strategies. Competency 7 deals with behavioral and social skills of students.

Competency 9, the competency for which this group reported the least amount of training, states that the diagnostician develops collaborative relationships and demonstrates skills for scheduling, time management, and organization.

Table 14

Diagnosticians with 6-10 Years Experience Question 3 Response of “No Training” or “Little Training”

Competency	Outcome	Expected	O-E	O-E sq	O-E sq / E
1	19.00	33.83	-14.83	219.81	6.50
2	43.00	32.73	10.27	105.56	3.23
3	25.00	33.00	-8.00	64.02	1.94
4	6.00	33.28	-27.28	743.98	22.36
5	16.00	33.28	-17.28	298.46	8.97
6	51.00	33.00	18.00	323.97	9.82*
7	57.00	33.00	24.00	575.95	17.45*
8	32.00	33.00	-1.00	1.00	0.03
9	78.00	31.90	46.10	2125.12	66.62*

Note. Competency is the SBEC Educational Diagnostician Competency. Outcome is the number of respondents who answered according to the table title. Expected is the number of participants mathematically expected to answer according to the table title. O-E is the difference between outcome and expected. O-E sq is the square of the O-E column. O-E sq/E is the chi-square statistic for that row. * $p < .05$

Question 4 asks about the importance of each competency to the field. Diagnosticians with 6-10 years of experience did not report any differences on this question.

Diagnosticians with 11-15 years experience rated Competency 7 as being less important in their daily practice (chi-square = 43.05). Eleven of the 75 respondents rated this competency as only “somewhat” important. This was the only difference on Questions 1 and 2 for any of the competencies.

On Question 3, responding to the amount of training they had on each competency, diagnosticians with 11-15 years experience rated Competency 4 as having more training (chi-square = 35.48) and Competency 9 as having less training (chi-square = 66.39).

Diagnosticians with 11-15 years experience rated Competencies 6 and 7 as being less important for the field of special education evaluation. chi-squares were 11.46 and 10.87 respectively (See Table 15).

Table 15

Diagnosticians with 11-15 Years Experience Question 4 Response of “Not Important” or “Somewhat Important”

Competency	Outcome	Expected	O-E	O-E sq	O-E sq / E
1	0	2.85	-2.85	8.14	2.85
2	6	2.78	3.22	10.35	3.72
3	0	2.71	-2.71	7.36	2.71
4	0	2.75	-2.75	7.55	2.75
5	1	2.64	-1.64	2.69	1.02
6	8	2.57	5.43	29.47	11.46*
7	8	2.64	5.36	28.71	10.87*
8	2	2.57	-0.57	0.33	0.13
9	1	2.47	-1.47	2.15	0.87

Note. Competency is the SBEC Educational Diagnostician Competency. Outcome is the number of respondents who answered according to the table title. Expected is the number of participants mathematically expected to answer according to the table title. O-E is the difference between outcome and expected. O-E sq is the square of the O-E column. O-E sq/E is the chi-square statistic for that row. * $p < .05$

Diagnosticians with 16-20 years experience made up the next group. These respondents showed no differences on Questions 1, 2, or 4. On Question 3, which asks about the amount of training they had received on each competency, they reported more training on Competency 4 (chi-square =15.83) and a lack of training on Competency 9 (chi-square = 14.25). Competency 4

deals with selecting and administering appropriate assessments. Competency 9 pertains to the diagnostician's skills in the areas of collaboration, organization and time-management.

Diagnosticians with 21-25 years experience reported that Competency 2 was less important in their practice (chi-square = 13.02). They also reported that Competency 7 was used "Rarely" or "Never" to a greater extent than others (chi-square = 15.16). This group also reported more training on Competency 4 (chi-square = 8.91) and less training on Competency 9 (chi-square = 22.22). They also reported that Competency 2 has less importance to the field (chi square = 8.12).

The final age group is the group of diagnosticians who report 26 or more years in the field. Twenty of the respondents reported this level of experience. Chi-square analysis found no differences between this group and the group as a whole.

Summary

This chapter presented a review of the results of the Perceptions of Importance of Diagnostic Competencies among Special Education Evaluation Personnel survey. A chi-square analysis indicated variance among diagnosticians' perceptions of importance of the SBEC diagnostician competencies. Further, variance was found across experience levels. Among notable findings, diagnosticians reported less perceived importance on the competencies related to diversity and student behavior. They also reported less perceived preparedness in organization, time management, and scheduling skills.

CHAPTER 5

SUMMARY

The purposes of this study were to explore the relevance of the current state competency standards adopted in Texas by the State Board for Educator Certification as they apply to the work of the educational diagnostician, as well as the perceived ability of training institutions to prepare professionals for the field of special education evaluation. The 432 participants were certified educational diagnosticians in Texas who completed an online survey instrument. Survey results were received via email and data was aggregated through a computer software program and analyzed for variance.

Discussion

The following five research questions provided the parameters of this study. They are: (1) Which of the Texas State Board of Educator Certification (SBEC) Educational Diagnostician Competencies (EDC) are deemed to be important in the daily practice of educational diagnosticians in Texas? (2) Do years of experience affect the educational diagnostician's perception of the SBEC EDC? (3) How often do educational diagnosticians utilize the SBEC EDC in their daily practice? (4) How well do educational diagnosticians perceive they have been prepared to meet the SBEC EDC? (5) How important do educational diagnosticians perceive the individual SBEC EDC to be?

In response to Research Question 1, the findings of the study indicate that educational diagnosticians report that Competency 5, which refers to skill in interpretation of formal and informal assessment and evaluations, is more important in their daily practice than the other competencies. Equally important to the field is the fact that Competencies 2 and 7, those related

to diversity issues in the special education process and the importance of behavioral and social skills of students to evaluation and instruction, are considered less important than the other competencies.

Research Question 2 asked if years of experience in the field impact the educational diagnostician's perception of the competencies. The findings of the study indicate that the amount of time that the diagnostician has been in the profession does have an impact on their perceptions. Differences existed among groups based upon years of experience in perceptions of importance of competencies and in the degree of training received. Possible explanations might be that experience in the field helps diagnosticians overcome scheduling and time management challenges. My anecdotal observation is that those who remain in the field master the logistical aspects of the position.

In answer to Research Question 3 related to the extent to which the competencies are used in daily practice, three were reported to be used more than the others. Competencies related to the use of disability criteria and identification procedures (Competency 1), program planning instructional decision-making (Competency 3), time management and organization (Competency 9) were used more frequently than the other competencies. Again Competencies 2 and 7 were reportedly used the least. A possible explanation for the perception of less frequent usage of the competency on behavioral and social aspects, is that diagnosticians may perceive that competency to be the realm of other educators such as school psychologists, administrators, and classroom teachers.

Research Question 4 asked about degree of preparation to meet the Competencies. Educational Diagnosticians report, in large part, to have been well prepared to meet the demands of the profession. They also report they have been well prepared in their understanding of

disabilities, test administration, program planning and instructional decision-making. However, they perceive they are under-prepared in Competency 6, which measures a diagnostician's understanding of appropriate curricula and instructional strategies for students with disabilities. They also report they were under-prepared for Competency 7, which relates to the behavioral and social skills of students and Competency 9, which pertains to the development of collaborative relationships, and skills in scheduling, time management, and organization. In relationship to Competency 9, university course work focuses on test selection and administration, relying on the practicum to train on the daily operations of the job such as time management and organization.

Research Question 5 asked, "How important do educational diagnosticians perceive the individual SBEC EDC to be?" This question examined the competencies' importance in a global sense in that it related to the importance of the competency to the field of special education evaluation in general. Competencies pertaining to test administration and interpretation were deemed to be important to the field, while those pertaining to diversity, curriculum and instruction, and behavior were considered to be less important than the other competencies to the profession in general.

The findings of this research are particular to educational diagnosticians in Texas, but they reflect patterns that can be found elsewhere in education. The need for organization and time management strategies as they apply to administrators and teachers are noted in the work of Kellogg (2005), MacDonald and Spence (2001). Although no research reflects the critical nature of these skills in the role of the diagnostician, parallels can be drawn with other educators. The importance of diversity awareness is well-documented (Hosp & Reschly, 2004; Skiba, Poloni-

Staudinger, Gallini, Simmons & Feggins-Azziz, 2006), but an acknowledgement of its lack of importance to the field is not widespread or readily found on the literature.

Based on the review of literature, a body of research related to educational diagnosticians is lacking. Although research exists related to the development and implementation of standards and competencies for teachers (CEC, 2000; Dean, Lauer, & Urquhart, 2005; Dilworth & Imig, 1995; Edelfelt & Raths, 1998) and school psychologists (Fagan, Gorin, & Tharinger, 2000; Kaslow, 2004), the development of standards for educational diagnosticians is not commonly found in the literature (Bruno & Walker, 1994; 1997; Fielding, 2001). No research exists related to educational diagnosticians and the competencies that evaluate their ability to appropriately execute the demands of the profession.

Many of the competencies related to the role of the educational diagnostician are particular to evaluators trained in assessment techniques, so generalizations to other avenues of education are difficult to make. Those dealing with test administration and interpretation and knowledge of disabilities are peculiar to the field of special education evaluation.

Recommendations

It is critical that competencies and standards in the field of education align with the realities of field-based practice, and that training programs adequately prepare educators for the challenges of the educational setting. It appears that, generally speaking, the competencies designed to direct the practice of educational diagnosis accurately reflect the demands of the profession. However, an alarming finding of this research is the fact that educational diagnosticians do not deem the issue of diversity and its impact on the assessment process to be as important to the field as other issues.

Given the changing demographics of our nation, it is imperative that educators as a whole, and diagnosticians in particular, understand diversity issues and the role they play in the overrepresentation of minorities in special education. Test bias against linguistically and culturally diverse students may result in over-identification of minorities as having disabilities. Despite the efforts of test developers to remove all cultural and linguistic bias from evaluation instruments, this bias persists.

Another alarming finding is related to the issue of behavior and the diagnostician's understanding of behavior and socialization as they affect the assessment, planning, and programming processes. Behavior is a key element in student performance and success and must be understood and considered when making decisions for students with disabilities.

Finally, diagnostician preparatory programs must examine their curricula to determine if instruction is being provided in all competencies to the degree needed. The findings of this study indicate that, in particular, the area of time management and organization, which is critical to the success of the new diagnostician, is often given little attention in preparation programs. Further, the area of test administration, which has been the focal point of most preparatory programs for many years, may, with the shift in theory in regard to the identification of learning disabilities, no longer be the critical skill for educational diagnosticians.

Implications for Future Research

The body of data gathered through this research effort requires further analysis. For example, survey responses on the importance of Competency 2, the understanding and application of knowledge of ethnic, cultural, linguistic and socioeconomic diversity, indicate a need for further investigation. An analysis of survey data by region of the state could also yield

greater insight into the pervasive nature of the perception that this competency is less important than others. The question arises as to whether or not the lack of importance of the competency is widespread or focused in particular geographic regions of the state. For example, cultural and linguistic issues may be perceived as more important in areas with more cultural diversity.

The survey data also yielded information regarding types of undergraduate and graduate degrees held by the respondents. Further analysis of the data could be undertaken to determine any relationship between perceived importance or utilization of the competencies and undergraduate or graduate preparation in special education. Likewise, demographic data gathered through the survey included information about training programs. Analysis could be conducted on the responses from graduates of particular programs to determine if patterns exist among graduates of a given institution.

Conclusion

The study began with the supposition that the educator competencies designed for educational diagnosticians vary in their perceived importance to the field of special education evaluation in general and the individual practice of the diagnostician in particular. Likewise, the frequency with which the competencies are utilized in daily practice was believed to be variable. Further, the supposition existed that perceptions of adequate content and training in preparatory programs among the competencies would reflect variance. Each of the research questions was addressed and the data reflected clear patterns in the perceptions of diagnosticians from around the state.

Current trends in evaluation and learning disability theory indicate that change in the role of the diagnostician is on the horizon. Training programs must prepare for that change and diagnosticians must embrace it.

APPENDIX A

EDUCATIONAL DIAGNOSTICIAN STANDARDS

Texas Administrative Code
TITLE 19
EDUCATION
PART 7
STATE BOARD FOR EDUCATOR CERTIFICATION
CHAPTER 239
STUDENT SERVICES CERTIFICATES
SUBCHAPTER C
EDUCATIONAL DIAGNOSTICIAN CERTIFICATE
RULE §239.83
Standards for the Educational Diagnostician Certificate

(a) The knowledge and skills identified in this section must be used by educational diagnostician preparation programs in the development of curricula and coursework and will be used by the State Board for Educator Certification as the basis for developing the assessments required to obtain the Standard Educational Diagnostician Certificate. These standards must also serve as the foundation for the professional growth plan, and continuing professional education activities required by §239.85 of this subchapter (relating to Requirements to Renew the Standard Educational Diagnostician Certificate).

(b) Standard I. The educational diagnostician understands and applies knowledge of the purpose, philosophy, and legal foundations of evaluation and special education.

(1) The beginning educational diagnostician knows and understands:

(A) state and federal regulations relevant to the role of the educational diagnostician;

(B) laws and legal issues related to the assessment and evaluation of individuals with educational needs;

(C) models, theories, and philosophies that provide the basis for special education evaluations;

(D) issues, assurances, and due process rights related to evaluation, eligibility, and placement within a continuum of services; and

(E) rights and responsibilities of parents/guardians, schools, students, and teachers and other professionals in relation to individual learning needs.

(2) The beginning educational diagnostician is able to:

(A) articulate the purpose of evaluation procedures and their relationship to educational programming; and

(B) conduct evaluations and other professional activities consistent with the requirements of

laws, rules and regulations, and local district policies and procedures.

(c) Standard II. The educational diagnostician understands and applies knowledge of ethical and professional practices, roles, and responsibilities.

(1) The beginning educational diagnostician knows and understands:

(A) ethical practices regarding procedural safeguards (e.g., confidentiality issues, informed consent) for individuals with disabilities;

(B) ethical practices related to assessment and evaluation;

(C) qualifications necessary to administer and interpret various instruments and procedures; and

(D) organizations and publications relevant to the field of educational diagnosis.

(2) The beginning educational diagnostician is able to:

(A) demonstrate commitment to developing quality educational opportunities appropriate for individuals with disabilities;

(B) demonstrate positive regard for the culture, gender, and personal beliefs of individual students;

(C) promote and maintain a high level of competence and integrity in the practice of the profession;

(D) exercise objective professional judgment in the practice of the profession;

(E) engage in professional activities that benefit individuals with exceptional learning needs, their families, and/or colleagues;

(F) comply with local, state, and federal monitoring and evaluation requirements;

(G) use copyrighted educational materials in an ethical manner; and

(H) participate in the activities of professional organizations in the field of educational diagnosis.

(d) Standard III. The educational diagnostician develops collaborative relationships with families, educators, the school, the community, outside agencies, and related service personnel.

(1) The beginning educational diagnostician knows and understands:

(A) strategies for promoting effective communication and collaboration with others, including

parents/guardians and school and community personnel, in a culturally responsive manner;

(B) concerns of parents/guardians of individuals with exceptional learning needs and appropriate strategies to help parents/guardians address these concerns;

(C) strategies for developing educational programs for individuals through collaboration with team members;

(D) roles of individuals with disabilities, parents/caregivers, teachers, and other school and community personnel in planning educational programs for individuals; and

(E) family systems and the role of families in supporting student development and educational progress.

(2) The beginning educational diagnostician is able to:

(A) use collaborative strategies in working with individuals with disabilities, parents/caregivers, and school and community personnel in various learning environments;

(B) communicate and consult effectively with individuals, parents/guardians, teachers, and other school and community personnel;

(C) foster respectful and beneficial relationships between families and education professionals;

(D) encourage and assist individuals with disabilities and their families to become active participants in the educational team;

(E) plan and conduct collaborative conferences with individuals who have exceptional learning needs and their families or primary caregivers;

(F) collaborate with classroom teachers and other school and community personnel in including individuals with exceptional learning needs in various learning environments;

(G) communicate with classroom teachers, administrators, and other school personnel about characteristics and needs of individuals with disabilities;

(H) use appropriate communication skills to report and interpret assessment and evaluation results;

(I) provide assistance to others who collect informal and observational data;

(J) effectively communicate to parents/guardians and professionals the purposes, methods, findings, and implications of assessments; and

(K) keep accurate and detailed records of assessments, evaluations, and related proceedings

(e.g., ARD/IEP meetings, parent/guardian communications and notifications).

(e) Standard IV. The educational diagnostician understands and applies knowledge of student assessment and evaluation, program planning, and instructional decision making.

(1) The beginning educational diagnostician knows and understands:

(A) the characteristics, needs, and rights of individual students in relation to assessment and evaluation for placement within a continuum of services;

(B) the relationship between evaluation and placement decisions; and

(C) the role of team members, including the student when appropriate, in planning an individualized program.

(2) The beginning educational diagnostician is able to:

(A) use assessment and evaluation information to plan individualized programs and make instructional decisions that result in appropriate services for individuals with disabilities, including those from culturally and/or linguistically diverse backgrounds;

(B) interpret and use assessment and evaluation data for targeted instruction and ongoing review; and

(C) assist in identifying realistic expectations for educationally relevant behavior (e.g., vocational, functional, academic, social) in various settings.

(f) Standard V. The educational diagnostician knows eligibility criteria and procedures for identifying students with disabilities and determining the presence of an educational need.

(1) The beginning educational diagnostician knows and understands:

(A) characteristics of individuals with disabilities, including those with different levels of severity and with multiple disabilities;

(B) educational implications of various disabilities; and

(C) the variation in ability exhibited by individuals with particular types of disabilities.

(2) The beginning educational diagnostician is able to:

(A) access information on the cognitive, communicative, physical, social, and emotional characteristics of individuals with disabilities;

(B) gather background information regarding the academic, medical, and family history of individuals with disabilities; and

(C) use various types of assessment and evaluation procedures appropriately to identify students with disabilities and to determine the presence of an educational need.

(g) Standard VI. The educational diagnostician selects, administers, and interprets appropriate formal and informal assessments and evaluations.

(1) The beginning educational diagnostician knows and understands:

(A) basic terminology used in assessment and evaluation;

(B) standards for test reliability;

(C) standards for test validity;

(D) procedures used in standardizing assessment instruments;

(E) possible sources of test error;

(F) the meaning and use of basic statistical concepts used in assessment and evaluation (e.g., standard error of measurement, mean, standard deviation);

(G) uses and limitations of each type of assessment instrument;

(H) uses and limitations of various types of assessment data;

(I) procedures for screening, prereferral, referral, and eligibility;

(J) the appropriate application and interpretation of derived scores (e.g., standard scores, percentile ranks, age and grade equivalents, stanines);

(K) the necessity of monitoring the progress of individuals with disabilities;

(L) methods of academic and nonacademic (e.g., vocational, developmental, assistive technology) assessment and evaluation; and

(M) methods of motor skills assessment.

(2) The beginning educational diagnostician is able to:

(A) collaborate with families and other professionals in the assessment and evaluation of individuals with disabilities;

(B) select and use assessment and evaluation materials based on technical quality and individual student needs;

- (C) score assessment and evaluation instruments accurately;
 - (D) create and maintain assessment reports;
 - (E) select or modify assessment procedures to ensure nonbiased results;
 - (F) use a variety of observation techniques;
 - (G) assess and interpret information using formal/informal instruments and procedures in the areas of cognitive/adaptive behavior and academic skills;
 - (H) determine the need for further assessment in the areas of language skills, physical skills, social/emotional behavior, and assistive technology;
 - (I) determine a student's needs in various curricular areas, and make intervention, instructional, and transition planning recommendations based on assessment and evaluation results;
 - (J) make recommendations based on assessment and evaluation results;
 - (K) prepare assessment reports; and
 - (L) use performance data and information from teachers, other professionals, individuals with disabilities, and parents/guardians to make or suggest appropriate modifications and/or accommodations within learning environments.
- (h) Standard VII. The educational diagnostician understands and applies knowledge of ethnic, linguistic, cultural, and socioeconomic diversity and the significance of student diversity for evaluation, planning, and instruction.
- (1) The beginning educational diagnostician knows and understands:
 - (A) issues related to definition and identification procedures for individuals with disabilities, including individuals from culturally and/or linguistically diverse backgrounds;
 - (B) characteristics and effects of the cultural and environmental backgrounds of students and their families, including cultural and linguistic diversity, socioeconomic diversity, abuse/neglect, and substance abuse;
 - (C) issues related to the representation in special education of populations that are culturally and linguistically diverse;
 - (D) ways in which diversity may affect evaluation; and
 - (E) strategies that are responsive to the diverse backgrounds and particular disabilities of individuals in relation to evaluation, programming, and placement.

(2) The beginning educational diagnostician is able to:

(A) apply knowledge of cultural and linguistic factors to make appropriate evaluation decisions and instructional recommendations for individuals with disabilities; and

(B) recognize how student diversity and particular disabilities may affect evaluation, programming, and placement, and use procedures that ensure nonbiased results.

(i) Standard VIII. The educational diagnostician knows and demonstrates skills necessary for scheduling, time management, and organization.

The beginning educational diagnostician knows and understands:

(A) time management strategies and systems appropriate for various educational situations and environments;

(B) legal and regulatory timelines, schedules, deadlines, and reporting requirements; and

(C) methods for organizing, maintaining, accessing, and storing records and information.

(2) The beginning educational diagnostician is able to:

(A) select, adapt, or design forms to facilitate planning, scheduling, and time management;

(B) maintain eligibility folders; and

(C) use technology appropriately to organize information and schedules.

(j) Standard IX. The educational diagnostician addresses students' behavioral and social interaction skills through appropriate assessment, evaluation, planning, and instructional strategies.

(1) The beginning educational diagnostician knows and understands:

(A) requirements and procedures for functional behavioral assessment, manifestation determination review, and behavioral intervention plans;

(B) applicable laws, rules and regulations, and procedural safeguards regarding the planning and implementation of behavioral intervention plans for individuals with disabilities;

(C) ethical considerations inherent in behavior interventions;

(D) teacher attitudes and behaviors that influence the behavior of individuals with disabilities;

(E) social skills needed for school, home, community, and work environments;

(F) strategies for crisis prevention, intervention, and management;

(G) strategies for preparing individuals to live productively in a multiclass, multiethnic, multicultural, and multinational world; and

(H) key concepts in behavior intervention (e.g., least intrusive accommodations/modifications within the learning environment, reasonable expectations for social behavior, social skills curricula, cognitive behavioral strategies).

(2) The beginning educational diagnostician is able to:

(A) conduct functional behavioral assessments;

(B) assist in the development of behavioral intervention plans; and

(C) participate in manifestation determination review.

(k) Standard X. The educational diagnostician knows and understands appropriate curricula and instructional strategies for individuals with disabilities.

(1) The beginning educational diagnostician knows and understands:

(A) instructional strategies, technology tools and applications, and curriculum materials for students with disabilities within the continuum of services;

(B) varied learning styles of individuals with disabilities;

(C) curricula for the development of motor, cognitive, academic, social, language, affective, career, and functional skills for individuals with disabilities;

(D) techniques for modifying instructional methods and materials for individuals with disabilities;

(E) functional skills instruction relevant to transitioning across environments (e.g., preschool to elementary school, school to work);

(F) supports needed for integration into various program placements; and

(G) individualized assessment strategies for instruction (e.g., authentic assessment, contextual assessment, curriculum-based assessment).

(2) The beginning educational diagnostician is able to:

(A) interpret and use assessment and evaluation data for instructional planning; and

(B) use assessment and evaluation, planning, and management procedures that are appropriate in relation to student needs and the instructional environment.

Source Note: The provisions of this §239.83 adopted to be effective April 28, 2002, 27 TexReg 3351

APPENDIX B

EDUCATIONAL DIAGNOSTICIAN COMPETENCIES

DOMAIN I—STUDENTS WITH DISABILITIES

Competency 001

The educational diagnostician understands and applies knowledge of federal and state disability criteria and identification procedures for determining the presence of an educational need.

The beginning educational diagnostician:

- Recognizes and applies knowledge of the cognitive, academic, communicative, physical, social, and emotional characteristics of individuals with disabilities, including those with different levels of severity and with multiple disabilities.
- Knows how to access information on the cognitive, academic, communicative, physical, social, and emotional characteristics of individuals with various disabilities.
- Demonstrates awareness of the variation in ability among individuals with particular types of disabilities.
- Analyzes the educational implications of various disabilities.
- Knows how to use various types of assessment and evaluation procedures to identify students with disabilities and determine the presence of an educational need.
- Knows how to gather and use background information regarding the educational/developmental (e.g., behavioral, social, academic), medical, and family history of individuals with disabilities.

Competency 002

The educational diagnostician understands and applies knowledge of ethnic, cultural, linguistic, and socioeconomic diversity and the significance of individual diversity for evaluation, planning, and instruction.

The beginning educational diagnostician:

- Demonstrates knowledge of issues related to the identification of disabilities in individuals from ethnically, culturally, linguistically, and/or socioeconomically diverse backgrounds.
- Recognizes how the ethnic, cultural, and environmental background of students and their families, including linguistic and socioeconomic diversity, may affect evaluation, planning, and instruction.
- Applies knowledge of cultural and linguistic factors to make appropriate evaluation decisions and instructional recommendations for individuals with disabilities.

- Uses strategies and procedures that are responsive to the diverse backgrounds and particular disabilities of individuals in relation to evaluation, programming, and placement and that ensure nonbiased results.
- Demonstrates awareness of issues related to the representation in special education of populations that are culturally and linguistically diverse.

DOMAIN II—ASSESSMENT AND EVALUATION

Competency 003

The educational diagnostician understands and applies knowledge of student assessment and evaluation, program planning, and instructional decision-making.

The beginning educational diagnostician:

- Demonstrates knowledge of the characteristics and needs of individual students in relation to assessment and evaluation for their least restrictive placement within a continuum of services.
- Knows the rights of parents/guardians and students (i.e., procedural safeguards) in relation to assessment and evaluation.
- Applies knowledge of the links between evaluation, goals and objectives, and placement decisions.
- Uses assessment and evaluation information to assist in identifying realistic expectations for educationally relevant behavior (e.g., vocational, functional, academic, social) in various settings.
- Interprets and uses assessment and evaluation information to plan individualized programs, make instructional decisions, and support ongoing review.
- Knows the roles of team members, including the student when appropriate, in planning an individualized program.

Competency 004

The educational diagnostician selects and administers appropriate formal and informal assessments and evaluations.

The beginning educational diagnostician:

- Applies knowledge of basic terminology and statistical concepts (e.g., standard error of measurement, mean, standard deviation) used in assessment and evaluation.
- Demonstrates knowledge of standards for test norming, reliability, and validity; procedures used in standardizing assessment instruments; and sources of measurement error.

- Demonstrates knowledge of how to select and use assessment and evaluation materials based on technical quality and individual student needs (e.g., communication, physical and other disabilities).
- Demonstrates knowledge of how to select or modify assessment procedures to minimize bias in results.
- Applies knowledge of the uses and limitations of various types of assessment instruments (e.g., norm-referenced, criterion-referenced) and observation techniques (e.g., anecdotal, frequency, temporal).
- Applies knowledge of methods used for academic and nonacademic assessments (e.g., vocational, developmental, assistive technology, motor skills).
- Applies knowledge of procedures for screening, prereferral, referral, and eligibility.
- Demonstrates the ability to score assessment and evaluation instruments accurately, and to create and maintain evaluation reports according to federal and state guidelines.
- Knows how to collaborate effectively with families and with other professionals in assessing and evaluating individuals with disabilities.

Competency 005

The educational diagnostician applies skills for interpreting formal and informal assessments and evaluations.

The beginning educational diagnostician:

- Analyzes the uses and limitations of various types of formal and informal assessment and evaluation data.
- Demonstrates knowledge of the appropriate application and interpretation of derived scores (e.g., standard scores, percentile ranks, age and grade equivalents, stanines, T-scores, z-scores).
- Applies skills for evaluating and interpreting information derived from formal and informal instruments and procedures in the areas of cognitive ability, adaptive behavior, and academic skills.
- Recognizes when a student needs further assessment and/or evaluation, including that conducted by other professionals, in specific areas (e.g., language skills, physical skills, social/emotional behavior, assistive technology needs).
- Uses assessment and evaluation results to determine a student's needs in various curricular areas and to make recommendations for intervention, instruction, and transition planning.

- Uses performance data and information from teachers, other professionals, the student, and the student's parents/guardians to recommend appropriate modifications and/or accommodations within learning environments.
- Recognizes the need to monitor the progress of individuals with disabilities.

DOMAIN III—CURRICULUM AND INSTRUCTION

Competency 006

The educational diagnostician understands appropriate curricula and instructional strategies for students with disabilities.

The beginning educational diagnostician:

- Demonstrates knowledge of curricula for the development of motor, cognitive, academic, social, language, affective, career, and functional skills for students with disabilities.
- Demonstrates knowledge of individualized assessment strategies for instruction (e.g., authentic assessment, contextual assessment, curriculum based assessment).
- Applies skills for interpreting assessment and evaluation data and using data for instructional recommendations.
- Demonstrates knowledge of a variety of instructional strategies, technology tools, and curriculum materials to address the individual needs and varied learning styles of students with disabilities within the continuum of services.
- Knows how to modify curriculum content for individuals with disabilities.
- Knows how to select and adapt instructional methods, strategies, and materials to provide accommodations for individuals with disabilities.
- Applies knowledge of functional skills instruction for transitioning across environments (e.g., preschool to elementary school, school to work) and the supports needed for transition and integration into various program placements.

Competency 007

The educational diagnostician understands the use of appropriate assessment, evaluation, planning, and instructional strategies for developing students' behavioral and social skills.

The beginning educational diagnostician:

- Demonstrates knowledge of requirements and procedures for functional behavioral assessments and manifestation determination reviews.

- Knows applicable laws, rules and regulations, and procedural safeguards regarding the planning and implementation of behavioral intervention plans for students with disabilities.
- Demonstrates knowledge of ethical considerations in all aspects of behavior intervention.
- Demonstrates knowledge of social skills needed for school, home, community, and work environments.
- Demonstrates knowledge of the effects of antecedents and consequences, including teacher attitudes and behaviors, on the behavior of students with disabilities.
- Demonstrates knowledge of strategies for preparing students to live productively in a multiclass, multiethnic, multicultural, and multinational world.
- Knows strategies for crisis prevention, intervention, and management for students with disabilities.
- Applies knowledge of key concepts in behavior intervention (e.g., least intrusive intervention within the learning environment, reasonable expectations for social behavior, social skills curricula, cognitive behavioral strategies).

DOMAIN IV—FOUNDATIONS AND PROFESSIONAL ROLES AND RESPONSIBILITIES

Competency 008

The educational diagnostician understands and applies knowledge of professional practices, roles, and responsibilities and the philosophical, legal, and ethical foundations of evaluation related to special education.

The beginning educational diagnostician:

- Demonstrates knowledge of models and theories that provide the basis for special education evaluations, and knows the purpose of evaluation procedures and their relationship to educational programming.
- Applies knowledge of state and federal laws, rules, and regulations related to the roles and activities of the educational diagnostician, including the assessment and evaluation of individuals with educational needs.
- Knows how to comply with local, state, and federal monitoring and evaluation requirements.
- Applies knowledge of issues, assurances, and due process rights related to evaluation, eligibility, and placement within a continuum of services.
- Demonstrates knowledge of the rights and responsibilities of parents/ guardians, schools, students, teachers, and other professionals in relation to individual learning needs.

- Applies knowledge of ethical practices (e.g., in relation to confidentiality, informed consent, placement, state accountability measures).
- Knows how to create quality educational opportunities that are appropriate for individuals with disabilities and reflect respect for their culture, gender, and personal beliefs.
- Knows qualifications necessary to administer and interpret various instruments and procedures.
- Knows organizations and publications relevant to the field of educational diagnosis, and demonstrates awareness of the importance of engaging in activities that foster professional competence and benefit individuals with exceptional learning needs, their families, and/or colleagues.

Competency 009

The educational diagnostician develops collaborative relationships and demonstrates skills for scheduling, time management, and organization.

The beginning educational diagnostician:

- Applies skills and strategies for engaging in effective communication, collaboration, and consultation with others (e.g., students with disabilities, parents/guardians, classroom teachers, other school and community personnel) to meet the needs of individuals with disabilities in a culturally responsive manner.
- Demonstrates knowledge of family systems and the role of parents/guardians in supporting student development and educational progress, and applies strategies for encouraging students' and families' active participation in the educational team, addressing families' concerns, and fostering respectful and beneficial relationships between families and education professionals.
- Applies skills for effective communication and collaboration in a variety of contexts (e.g., conducting conferences with students and families, working with other professionals to include students in specific learning environments, communicating about characteristics and needs of students with disabilities, reporting and interpreting assessment results to professionals and parents/guardians).
- Knows the roles of students with disabilities, parents/guardians, teachers, and other school and community personnel in planning educational programs, and knows strategies for collaborating with team members to develop appropriate educational programs for individuals.
- Knows how to keep accurate and detailed records of assessments, evaluations, and related proceedings (e.g., ARD/IEP meetings, parent/ guardian communications and notifications).
- Demonstrates knowledge of time management strategies and systems appropriate for various educational situations and environments, including the selection, modification, and design of forms to facilitate planning and scheduling.

- Knows how to use technology appropriately to organize information and schedules.
- Applies knowledge of legal and regulatory timelines, schedules, deadlines, and reporting requirements and methods for maintaining eligibility folders and for organizing, maintaining, accessing, and storing records.

APPENDIX C
LETTER TO SURVEY PARTICIPANTS

Dear Evaluation Specialist,

My name is Lisa Cavin and I am a doctoral candidate in the Department of Technology and Cognition at the University of North Texas. My dissertation research consists of a project that focuses upon the perceptions of special education evaluation professionals. Specifically, I am interested in the perceived importance of the state competencies for diagnosticians measured by the Texas Examination of Educator Standards (TExES). I would appreciate your participation in my dissertation research by completing a questionnaire.

Please read the informed consent notice below and then follow the link attached to begin the Perceptions of Importance of Diagnostic Competencies of Evaluation Personnel Survey. The first set of questions is designed to gather demographic information. Following are sets of questions that address each of the nine competencies related to diagnostician preparedness in Texas. Each competency is addressed on a separate page with four questions related to each competency. Please read each question carefully and respond electronically. Items marked with an asterisk indicate required items. The survey consists of approximately 50 questions in a multiple-choice format and requires 8-12 minutes for completion.

Completion of the survey will automatically submit your responses to a database that will be used to gather information from across the state. Completion of the survey involves no foreseeable risk. Your participation is voluntary and may be discontinued at any time. The survey tool is anonymous. All data will be reported on a group basis with individual data being reported to no one. Any questions may be directed to Lisa Cavin at (214) 538-0649 or lcavin@sbcglobal.net or Dr. Bertina Combes, at (940) 565-2628 or combes@unt.edu. This project has been reviewed and approved by the University of North Texas Institutional Review Board (940-565-3940).

The purpose of the study is to investigate the relevance of the current state standards to the work of the evaluation specialist and the perceived ability of training institutions to ready professionals for the field of special education evaluation. Your participation will help further the knowledge regarding effective training of evaluation professionals and will assist in guiding training entities as they review critical curricular components.

Clicking the link to the survey indicates your informed consent to participate in the study and that you are 18 years of age or older. You may print a copy of this informed consent notice for your records.

The link to the survey is: <http://www.esc11.net/lcavin/diagsurvey>

Thank you,

Lisa Cavin
Doctoral Candidate
University of North Texas

APPENDIX D
SURVEY INSTRUMENT

Importance of Diagnostic Competencies Survey

Page 1 of 10

Demographic Information

Please address each question below by clicking the appropriate answer choice. After completing the demographic information page, click "next" to answer four questions on each subsequent page related to the nine diagnostician competencies.

1. How many years of experience do you have in the field of education?*

- ☐ 0-5
- ☐ 6-10
- ☐ 11-15
- ☐ 16-20
- ☐ 21-25
- ☐ 26-30
- ☐ 31 or more

2. How many years have you worked as an evaluation specialist?*

- ☐ 0-5
- ☐ 6-10
- ☐ 11-15
- ☐ 16-20
- ☐ 21-25
- ☐ 26-30
- ☐ 31 or more

3. Are you currently working in the field of special education as an evaluation specialist?*

- ☐ Yes
- ☐ No

4. Through what type of preparatory program did you obtain your professional evaluation certification/licensure?*

- ☐ traditional university program
- ☐ alternative certification program

5. Please enter the name of the training institution through which you received your evaluation credentials.*

6. Which best describes your role?*

- ☐ Educational Diagnostician
- ☐ Licensed Specialist in School Psychology
- ☐ Speech/Language Pathologist
- ☐ Special Education Administrator
- ☐ Other, please specify

7. What is the highest degree you have obtained?*

- ☐ Master's Degree
- ☐ Master's plus additional graduate hours
- ☐ Doctoral Degree

8. Is your undergraduate degree in special education?*

- ☐ Yes
- ☐ No

9. Is your master's degree in special education?*

- ☐ Yes
- ☐ No

10. Is your doctoral degree in special education?*

- ☐ Yes
- ☐ No
- ☐ Not Applicable

11. Through what type of preparatory program did you obtain your teaching certification?*

- ☐ traditional university program
- ☐ alternative certification program
- ☐ not applicable

12. What grade levels do you serve in your current role?*

- ☐ Elementary
- ☐ Secondary
- ☐ All Levels

13. What is your age?*

- ☐ 20-25
- ☐ 26-30
- ☐ 31-35
- ☐ 36-40
- ☐ 41-45
- ☐ 46-50
- ☐ 51-55
- ☐ 56-60
- ☐ 61 or older

14. What is your gender?*

- ☐ Male
- ☐ Female

15. What is your ethnicity?*

- ☐ American Indian or Alaskan Native
- ☐ African American, Black
- ☐ Asian or Pacific Islander
- ☐ Hispanic, Latino
- ☐ White, Non-Hispanic Origin
- ☐ Other, please specify

Competency 1

SBEC Diagnostician Competency 1 states that the educational diagnostician understands and applies knowledge of federal and state disability criteria and identification procedures for determining the presence of an educational need.

16. How important do you believe this competency is in your practice of special education evaluation?*

- ☐ Not important at all
- ☐ Somewhat important
- ☐ Important
- ☐ Very important

17. How often do you utilize this competency in your daily work?*

- ☐ Never
- ☐ Rarely
- ☐ Occasionally
- ☐ Frequently

18. How well do you feel you were prepared to meet this competency through your preparatory program?*

- ☐ Unprepared
- ☐ Inadequately prepared
- ☐ Adequately prepared
- ☐ Fully prepared

19. How important do you believe this competency is to the field of educational evaluation?*

- ☐ Not important at all
- ☐ Somewhat important
- ☐ Important
- ☐ Very Important

Competency 2

SBEC Diagnostician Competency 2 states that the educational diagnostician understands and applies knowledge of ethnic, cultural, linguistic, and socioeconomic diversity and the significance of individual diversity for evaluation, planning, and instruction.

20. How important do you believe this competency is in your practice of special education evaluation?*

Not important at all

Somewhat important

Important

Very important

21. How often do you utilize this competency in your daily work?*

Never

Rarely

Occasionally

Frequently

22.

How well do you feel you were prepared to meet this competency through your preparatory program?*

Unprepared

Inadequately prepared

Adequately prepared

Fully prepared

23.

How important do you believe this competency is to the field of educational evaluation?*

Not important at all

Somewhat important

Important

Very Important

Competency 3

SBEC Diagnostician Competency 3 states that the educational diagnostician understands and applies knowledge of student assessment and evaluation, program planning, and instructional decision making.

24. How important do you believe this competency is in your practice of special education evaluation?*

- ☐ Not important at all
- ☐ Somewhat important
- ☐ Important
- ☐ Very important

25. How often do you utilize this competency in your daily work?*

- ☐ Never
- ☐ Rarely
- ☐ Occasionally
- ☐ Frequently

26. How well do you feel you were prepared to meet this competency through your preparatory program?*

- ☐ Unprepared
- ☐ Inadequately prepared
- ☐ Adequately prepared
- ☐ Fully prepared

27. How important do you believe this competency is to the field of educational evaluation?*

- ☐ Not important at all
- ☐ Somewhat important
- ☐ Important
- ☐ Very Important

Competency 4

SBEC Diagnostician Competency 4 states that the educational diagnostician selects and administers appropriate formal and informal assessments and evaluations.

28. How important do you believe this competency is in your practice of special education evaluation?*

- ☐ Not important at all
- ☐ Somewhat important
- ☐ Important
- ☐ Very important

29. How often do you utilize this competency in your daily work?*

- ☐ Never
- ☐ Rarely
- ☐ Occasionally
- ☐ Frequently

30. How well do you feel you were prepared to meet this competency through your preparatory program?*

- ☐ Unprepared
- ☐ Inadequately prepared
- ☐ Adequately prepared
- ☐ Fully prepared

31. How important do you believe this competency is to the field of educational evaluation?*

- ☐ Not important at all
- ☐ Somewhat important
- ☐ Important
- ☐ Very Important

Competency 5

SBEC Diagnostician Competency 5 states that the educational diagnostician applies skills for interpreting formal and informal assessments and evaluations.

32. How important do you believe this competency is in your practice of special education evaluation?*

- ☐ Not important at all
- ☐ Somewhat important
- ☐ Important
- ☐ Very important

33. How often do you utilize this competency in your daily work?*

- ☐ Never
- ☐ Rarely
- ☐ Occasionally
- ☐ Frequently

34. How well do you feel you were prepared to meet this competency through your preparatory program?*

- ☐ Unprepared
- ☐ Inadequately prepared
- ☐ Adequately prepared
- ☐ Fully prepared

35. How important do you believe this competency is to the field of educational evaluation?*

- ☐ Not important at all
- ☐ Somewhat important
- ☐ Important
- ☐ Very Important

Competency 6

SBEC Diagnostician Competency 6 states that the educational diagnostician understands appropriate curricula and instructional strategies for students with disabilities.

36. How important do you believe this competency is in your practice of special education evaluation?*

- ☐ Not important at all
- ☐ Somewhat important
- ☐ Important
- ☐ Very important

37. How often do you utilize this competency in your daily work?*

- ☐ Never
- ☐ Rarely
- ☐ Occasionally
- ☐ Frequently

38. How well do you feel you were prepared to meet this competency through your preparatory program?*

- ☐ Unprepared
- ☐ Inadequately prepared
- ☐ Adequately prepared
- ☐ Fully prepared

39. How important do you believe this competency is to the field of educational evaluation?*

- ☐ Not important at all
- ☐ Somewhat important
- ☐ Important
- ☐ Very Important

Competency 7

SBEC Diagnostician Competency 7 states that the educational diagnostician understands the use of appropriate assessment, evaluation, planning, and instructional strategies for developing students' behavioral and social skills.

40. How important do you believe this competency is in your practice of special education evaluation?*

Not important at all

- ☐
- ☐ Somewhat important
- ☐ Important
- ☐ Very important

41. How often do you utilize this competency in your daily work?*

- ☐ Never
- ☐ Rarely
- ☐ Occasionally
- ☐ Frequently

42. How well do you feel you were prepared to meet this competency through your preparatory program?*

- ☐ Unprepared
- ☐ Inadequately prepared
- ☐ Adequately prepared
- ☐ Fully prepared

43. How important do you believe this competency is to the field of educational evaluation?*

- ☐ Not important at all
- ☐ Somewhat important
- ☐ Important
- ☐ Very Important

Competency 8

SBEC Diagnostician Competency 8 states that the educational diagnostician understands and applies knowledge of professional practices, roles, and responsibilities and the philosophical, legal, and ethical foundations of evaluation related to special education.

44. How important do you believe this competency is in your practice of special education evaluation?*

- ☐ Not important at all
- ☐ Somewhat important
- ☐ Important
- ☐ Very important

45. How often do you utilize this competency in your daily work?*

- ☐ Never
- ☐ Rarely
- ☐ Occasionally
- ☐ Frequently

46. How well do you feel you were prepared to meet this competency through your preparatory program?*

- ☐ Unprepared
- ☐ Inadequately prepared
- ☐ Adequately prepared
- ☐ Fully prepared

47.
How important do you believe this competency is to the field of educational evaluation?*

- ☐ Not important at all
- ☐ Somewhat important
- ☐ Important
- ☐ Very Important

Competency 9

SBEC Diagnostician Competency 9 states that the educational diagnostician develops collaborative relationships and demonstrates skills for scheduling, time management, and organization.

48. How important do you believe this competency is in your practice of special education evaluation?*

- ☐ Not important at all
- ☐ Somewhat important
- ☐ Important
- ☐ Very important

49. How often do you utilize this competency in your daily work?*

- ☐ Never
- ☐ Rarely
- ☐ Occasionally
- ☐ Frequently

50. How well do you feel you were prepared to meet this competency through your preparatory program?*

- ☐ Unprepared
- ☐ Inadequately prepared
- ☐ Adequately prepared
- ☐ Fully prepared

51. How important do you believe this competency is to the field of educational evaluation?*

- ☐ Not important at all
- ☐ Somewhat important
- ☐ Important
- ☐ Very Important

52. Please add additional comments if desired.

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